THE LANCET.

VOL. II.] LONDON, SATURDAY, APRIL 2, 1836. [1835-36.

LECTURES

ON

DISEASES OF THE BRAIN AND NERVOUS SYSTEM,

NOW IN THE COURSE OF DELIVERY IN THE UNIVERSITY OF PARIS.

BY M. ANDRAL,

Physician in Chief to the Hôpital de la Pitie, and Professor, and Lecturer on the Principles and Practice of Medicine, in the Faculté de Médecine of Paris.

LECTURE XVIII.

INDURATION AND ŒDEMA OF THE NERVOUS CENTRES.

INDURATION of the nervous centres is an obscure disease; it is, besides, seldom observed, and so little has been done upon this subject, even by pathologists of the present day, that our description must be necessarily imperfect, and will embrace but a few points of its history; we shall, however, consider it apart, and by laying before you the actual state of our knowledge on this lesion, we hope to put you in the way of pursuing any researches you may be inclined to make, with a greater prospect of success.

Induration of the cerebro-spinal axis may be general or partial; when general, it affects the totality of the brain and spinal marrow at the same time; when partial, and this case is much more frequent than the former, it is confined to a single part of the nervous centres, as for example, the convolutions, the central parts, the mesocephale, the medulla oblongata, &c. The increased consistency of the nervous pulp, which constitutes induration, presents itself to our notice in different degrees. In the first and most feeble form or degree, the brain is merely more firm than it should be, and bears some resemblance to one that had been preserved for some considerable time in dilute nitric acid; in a second degree the indurated brain is much more solid; it feels like a mass of wax, or, if you will pardon the expression, like a Gruyere cheese. In the third degree the nervous substance is completely solidified; it is elastic, and in texture, density, and firmness of tissue, bears a strong resemblance to fibro-cartilage; there is not, however, any transformation of substance; the elements of the nervous pulp remain the same, but its molecules are brought so intimately together as to represent a solid body.

Whatever be the degree of the induration, it may, as we have said before, affect various parts of the cerebro-spinal axis. General induration is always observed under the first degree; the whole brain and spinal marrow are then more firm than in the normal state, but unequally so, some parts being more hardened than others. Partial induration of the nervous centres has, on the other hand, been most frequently observed under the second and third forms, and appears to be the effect of a more chronic lesion; it may affect the cerebral hemispheres alone, and there it is often confined to the convolutions, those either at the convexity or the base of the brain; the convolutions are in these cases hardened over a large extent of surface, resembling Gruyere cheese in colour and consistency, or they are even converted into a substance like cartilage. In other cases the induration occupies the medullary white substance in the centre of the hemispheres; examples are cited by authors, of very considerable induration, seated in the central parts of the brain; and M. JŒGER reports a case where the induration was limited to the parietes of the posterior horn of the lateral ventricles. You will also find the history of certain cases where the lesion we now speak of existed at the surface or in the substance of the cerebellum, and in various parts of the spinal marrow. Let us now turn our attention to the different

Lesions which may accompany Induration

of the nervous centres. In some cases we find the indurated parts in a state of hyperæmia; this is particularly the case in the first degree of the disease, where we find the vessels much injected, and, when cut through, furnishing a good many bleeding points. In other cases the contrary is observed; the nervous pulp, as we ourselves and many other authors have noticed, is struck with induration, and at the same time with re-

markable anemia. When the indurated tissue is divided, it appears pale and hard like a piece of wax, and the gray substance does not furnish a single drop of blood. Finally, induration of the nervous pulp may coincide with hypertrophy or atrophy of the brain. Both of these latter cases have been observed, and are recorded in works on the diseases of the nervous system. To sum up what we have said on the complications of induration of the nervous pulp, you may find it coexisting with a variety of lesions that are developed independently of it, with congestion, with anemia, with hypertrophy, or with atrophy; we also sometimes observe the induration round the parietes of an old apoplectic cell, or in the neighbourhood of certain morbid productions; in these cases the lesion would seem to be the result of a chronic irritation of the cerebral substance, for the membranes close by the indurated points are very often thickened, and infiltrated with divers secretions; but in a great number of other cases we are compelled to refer partial induration of the brain to a perversion of nutrition, without being able to attribute this latter to irritation, or any known cause.

Induration of the nervous centres may be observed at all ages; it has been seen in an infant twenty months of age; and M. PAYEN met with a case in a girl six years of age; M. PINEL one in the adult; but it is impossible to say what influence the period of life may have on its production, as we are altogether without data upon this point. We now proceed to consider the symptoms that accompany induration of the nervous centres, and, according to custom, will follow them according as the lesion may be situated, in the cerebrum, in the cerebellum, or in the spinal marrow.

The Symptoms of Induration in the Cerebrum

seem to differ according as the disease is general or partial. Let us first take up general induration of the cerebral hemispheres. Here you certainly would be justified in thinking that the symptoms are of a marked character, and indicate the nature of the disease; but experience is far from confirming this supposition; on the other hand, it seems established by several examples that this lesion is often developed in a very short period of time, and that it is by no means easy to appreciate the symptoms to which it gives rise. Thus you will find some cases of general induration of the brain published by M. BOUILLAUD in the eighth volume of the *Archives Generales*, p. 477. There are also some cases in the Thesis of M. GAUDET (*Recherches sur l'Endurissement General du Cerveau, &c.*) sustained in the year 1825. In these two works you will observe certain facts which show, that the patients died in a few days with all the symptoms of ataxic fever, while the only remarkable change of structure that could be discovered after death, was this induration of the brain. The whole organ appeared as if it had been steeped for several days in strong nitric acid.

In the cases just now alluded to, the disease is evidently of an acute nature. Chronic induration of the whole brain is a much rarer disease. We are not acquainted with more than three examples; one has been reported by a German physician; the second is contained in the 13th volume of the *Archives Generales*; the third you will find in the *Journal de Progress*. The symptoms of this chronic form were chiefly connected with modifications of the intelligence and motility. As to the intellectual faculties, idiocy was observed in one case, and the two other patients were habitually dull and stupid; the intelligence was manifestly weakened, though not entirely lost. Thus you observe in three cases a modification of the mental power, which consisted in its diminution, not in its exaggeration. In the second case paralysis existed; and in the third, the muscular power was gradually weakened, and at length paralysis supervened, as in the former case. In one individual the first symptoms did not make their appearance before an advanced period of life, when the patient was 41 years of age.

Let us now examine partial induration of the brain: the form is rare, and we find only a few examples, scattered here and there in the records of the science. The most constant symptom of partial induration consists in some modification of the motility, which we may comprise, to avoid repeating what has been already said, under paralysis, contracture, and convulsions. In a certain number of cases we observe a greater or less trouble of the intellectual faculties, but in general these are not very remarkable, and are of infinitely less frequent than the modifications we meet with in the faculty of locomotion. In the history of other cases of partial induration of the brain, you will find epilepsy mentioned as the leading symptom, and in several of these the induration was confined to one of the horns of Ammion. In the sixth letter of M. LALLEMAND you may read a remarkable observation of a case where the power of speaking was considerably embarrassed: the patient could scarcely make himself understood, and after death the only lesion which could be discovered was a circumscribed induration of the middle lobe of the cerebrum.

This is all that we have to say respecting induration, whether general or partial, of the cerebral hemispheres: but other parts of the brain may, as we have said, undergo a change of consistency; let us throw a *coup d'œil* upon these, and first for the central parts. In one single case the septum lucidum is described as having been excessively hard.

We do not remember any examples of induration affecting the fornix, or the roof of the lateral ventricles.

Induration of the Cerebellum

seems to be a disease much more rare than induration of the cerebrum; at least we must conclude so were we to judge from the comparative number of cases published of each: thus we are acquainted with only two cases of induration confined to the cerebellum. One of these has been published by M. SERRES; in the other a very considerable portion of one of the cellular lobes was hardened, without giving rise to a single symptom. Let us now terminate this part of our subject by a few words upon

Induration of the Spinal Marrow.

In this portion of the cerebro-spinal axis the lesion, as in the brain, may be general or partial. In some cases the whole of the chord is excessively firm, dense, and indurated: when cut into, it gives the sensation of a solid mass, does not yield readily to traction, and is even capable of sustaining a very considerable weight. Thus M. BILLARD met a case at the *Enfans Trouvés*, in which the consistency of the chord was so greatly exaggerated beyond the normal standard, that when deprived of its membranes, it sustained an object suspended to it which weighed at least one pound: this infant had convulsive movements of the limbs. When the induration of the spinal marrow is thus general and extensive, it soon produces paralysis, which is mostly of a severe nature; but when the lesion is confined to a small portion of the chord, and especially if it occupies an elevated part, and progresses slowly, it may give rise to a diversity of symptoms, whose march and general features we shall illustrate by relating to you the following

*Interesting Case—Chronic Induration of the Medulla Oblongata and the Mesocephale.**

It is contained in a German journal of the present year, the *Gazette Medicale* of Berlin. The subject of this observation was a young man, twenty-four years of age, of a respectable family, who had a great talent for mechanical occupations. About the middle of the year 1830, he began to complain of not being able to execute his work in a satisfactory manner; he could not distinguish small objects, and sometimes was affected with dyplopia: from infancy he had strabismus of the left eye; this now became more marked; his voice lost its tone, and he was unable to walk without the assistance of a stick to prevent him from stumbling. As the patient had been delicate from his youth and always disliked exercise, he did not pay any attention to these circumstances. However, in the month of January, 1831, having occasion to make a voyage, and being exposed frequently to cold, he was at length seized at the post-house with a sudden rigidity of the members, which disabled him from walking for more than an hour.

On the following day the patient was visited by a physician, who found the same stiffness of the limbs, or, rather, an unwillingness to move. The patient also spoke very quickly and indistinctly, and frequently broke out with a fit of involuntary laughter; this latter symptom, which his mother assured us she had never before noticed, continued to the end of the disease, of which it formed a characteristic mark. The strabismus now became more violent; the man frequently saw double, and the hands lost their accustomed strength. The symptoms just enumerated, continued for several months in a chronic form, during which time the patient took mineral baths, and mercury, and, finally, had a seton placed in the neck. This latter remedy caused a good deal of disturbance in the system, and after a lapse of six weeks was discontinued, in consequence of its having apparently brought on a convulsive fit. The health seemed to improve considerably after the removal of the seton, and the patient slept well &c. for fourteen days. This amelioration did not, however, continue to make any progress. The force did not return, and the paralysis continued to advance slowly, though irresistibly. The patient was now unable to move about, and whenever he attempted to stir was seized with violent cramp in the extensor muscles of the great toes. No remedy of any consequence was now administered for some time. In the commencement of February, 1832, he was suddenly attacked with acute fever, and all the symptoms of apoplexy, viz. general paralysis, loss of the speech, weak irregular pulse; deglutition and expectoration very difficult; however, on closer examination, the intelligence was found to be intact, a proof that the brain was not implicated. This attack yielded to appropriate treatment; but it returned again in about thirty-six hours. The fever now assumed the tertian type, but the symptoms of apoplexy by which each access was accompanied, gradually diminished; it soon yielded to preparations of bark. The general symptoms of the disease continued with greater intensity after this attack; the paralysis was more extended, the difficulty of deglutition and the tendency to involuntary laughter more pronounced. However, the constitution of the patient did not seem

* We take the liberty of giving this curious case a little more fully (from the original source) than it was described by M. ANDRAL, who took it from a French journal. The case is reported by M. ULRICH in the *Gazette Medicale* of Berlin, No. 12, March 1835.

to suffer much; he slept and ate well, and his memory was very faithful, and the intellectual faculties, as well as the organs of sense, appeared rather exalted than weakened. *The sensibility was highly increased over the whole skin*, rendering the patient very tender to all external impressions. These two latter phenomena continued henceforward until death. The patient seldom complained of any particular pain. He sometimes had cephalalgia on the left side of the occiput, accompanied by a ringing noise in the left ear.

In May, 1832, a febrile access similar to the former one supervened; this was attended with frequent efforts of vomiting and complete paralysis; the trunk was bent backwards in a kind of tetanic convulsion. This access was removed like the former one, but left behind it a new symptom, viz. general convulsions, during which the limbs were extended, and the head was thrown backwards. Towards the end of this summer the patient's condition became much worse; he was now unable to move the feet, which appeared, as it were, nailed to the ground. It was even necessary to feed him, as the arms and hands were completely paralyzed; the power of speech was also more modified; the convulsions and involuntary laughter were more frequent.

In October the patient's sleep became agitated, and the paralysis now affected *all the voluntary muscles of the body*; the muscles of the orbit and organs of speech were the last to give way, and the patient at length died in a state of complete helplessness, two years and four months after the first attack.

On examining the body, after death, the membranes lining the superior part of the spinal marrow were found much injected. The superior surface of both hemispheres of the brain was lined with a grayish half-transparent layer of coagulated lymph; however, neither the pia mater nor the arachnoid appeared to be thickened, or otherwise diseased. On dividing the cerebrum into thin slices, its colour and consistency appeared normal; perhaps it was a little paler than usual; the left lateral ventricle contained about a teaspoonful of fluid; the others were empty; the whole surface of the cerebellum was of a deep-red colour, but the membranes remained unchanged. On examining the inferior surface of the brain and medulla oblongata, a round oblong eminence, somewhat larger than a turkey bean, was observed occupying the right side of the medulla oblongata, and higher up on the left side, was a smaller eminence of similar appearance. These two brown-coloured eminences ascended as far as the posterior border of the pons varolii, which itself was partially indurated. The induration of the pons was most remarkable on the left side, where it formed a manifest protuberance; on the right side it did not advance beyond four lines from the posterior edge. On examining closely, it was found that the two eminences, which might easily have been taken for tumours, were nothing more than the indurated olivary and pyramidal bodies. On dividing the hardened mass, the induration was seen to penetrate five or six lines into the depth of their substance; it was much more marked on the right side than on the left, and in the pyramids more than in the olivary bodies. The restiform bodies, if we except a slight change of colour in the neighbourhood of the olivary bodies, were quite normal. The roots of the spinal accessory, the hypoglossal, and the pharyngeal nerves, were much injected, but not thickened. Nothing remarkable was found in the thoracic or abdominal cavities.

This was a case of chronic induration of the medulla oblongata and the mesocephale; the state of the intellectual faculties, which remained untouched to the very last moment of existence, showed sufficiently that the brain was not the seat of the lesion, while, on the contrary, the disturbance of various functions depending on organs which receive their nerves from the medulla oblongata, indicated at a very early period that this important part of the cerebro-spinal axis was implicated.

We have now passed in review the greater number of lesions of the cerebro-spinal axis, consisting in a change of organic structure; it only remains to describe alterations of secretion affecting the nervous centres.

ŒDEMA OF THE BRAIN.

The nervous centres are, like any other tissue, capable of becoming the seat of morbid products, varying considerably in appearance and nature, but all of which we are inclined to refer to some error or derangement in the secreting process; diseases of the nature we now speak of, are certainly seen much more frequently in other parts of the body; in those which are not properly secreting organs, we rarely find any other lesion, comprised under the class about to be treated of, except an exaggeration of the serous fluid, naturally secreted in moderate quantities by the cellular tissue of the organ. This is the lesion constituting œdema of the limbs, of the pulmonary tissue, &c.; it may exist likewise in the brain, and is then known under the name of œdema of the brain, a disease which is now universally admitted in nosological classifications. Cerebral œdema consists in an infiltration of a serous-like fluid into the fine cellular tissue that every where surrounds, envelops, and supports the nervous pulp; at each division of the cerebral substance with the scalpel, this fluid escapes in greater or less quantity from the divided surfaces; the

whole mass of the brain is evidently more moist, more liquid, than in the natural state.

In a great number of cases, this œdema of the cerebral substance coincides with an effusion of serum into the lateral ventricles. On first cutting through the hemispheres in an horizontal direction, we see the fluid escape, as it were, under the knife, and we soon distinguish the presence of fluctuation in the ventricular cavities, which are distended with a large quantity of serous effusion; however, in certain other cases we find it existing alone, without any dropsy of the ventricles, to whose presence it might possibly be attributed. The lesions which attend this œdema of the cerebral substance, vary in different cases. Sometimes we find the infiltrated nervous tissue excessively pale, and discoloured; at other times it is more developed than in the normal state, and presents the appearance of true hyperemia; in a word, the nervous centres, when infiltrated with a serous fluid, may at the same time be affected with a number of lesions independent of the principal malady, though impressing various appearances on the symptoms by which it is accompanied. Thus, for example, we may observe sometimes a notable change of consistency in the cerebral substance which is the seat of œdema; it is soft, and yields easily to pressure, but the modification of consistency is quite different from that seen in ramollissement; in other cases, on the contrary, the nervous pulp has not lost anything of its natural firmness, although infiltrated with a serous fluid in an evident manner.

These are the principal lesions which have been observed to coincide with œdema of the brain. As to varieties depending upon a difference of seat, we have not much to say. Œdema of the nervous centres has, as yet, been observed only in the hemispheres of the cerebrum, in its central parts, and in the corpora striata or optic thalami. We are not acquainted with any example recorded of its having been found in the cerebellum or in the spinal marrow. Any remarks we have to make will therefore refer exclusively to the lesion as situated in the cerebrum. Œdema of this portion of the cerebro-spinal axis may be

Developed under various Circumstances.

It sometimes attacks individuals otherwise in perfect health; it then constitutes the sole malady; at other times œdema attacks persons who have laboured for a length of time under some chronic disease, some affection of an abdominal or thoracic organ, of long standing. In such cases it must be regarded in the light of a complication. Finally, cerebral œdema may be produced as a consequence of chronic disease seated in the brain itself. This last form is not very rare; thus we often see it in the cerebral substance around an ancient apoplectic coagulum or cell, or round a softened point of the brain. The age at which œdema of the cerebrum may exist is indeterminate; it may exist, in fact, at all periods of life. Cases have been seen in the intra-uterine fœtus, in the child, in the adult man, and, finally, in the aged person; but we must allow, that individuals advanced in years are more liable to this disease than any others. The greatest number of examples we have, occur in the persons of individuals who have passed the middle period of life.

Symptoms of Cerebral Œdema.

Let us now see by what symptoms œdema of the cerebral tissue is accompanied. As in ramollissement, induration, and various other organic affections of the nervous centres, these symptoms may become grouped together in such a manner as to constitute two forms of the disease. In some cases we have a quick succession of well-marked phenomena, indicating an acute affection; in others, the disease is more or less chronic. Let us first take up the study of the acute form. Cerebral œdema, in the form of an acute disease, is much rarer than when it presents itself with the symptoms of a chronic malady. In the former case it sometimes commences as a violent attack of apoplexy; the individual suddenly falls down in a state of insensibility, and soon lies in profound coma; his limbs are relaxed, the pupils often dilated, the sensibility obtuse, in a word, he presents, as closely as possible, the *ensemble* of symptoms which constitute apoplexy of the cerebral hemispheres. The respiration soon becomes embarrassed and stertorous, the coma more and more profound, and death arrives exactly in the same way as in cases of cerebral hemorrhage. The march of this acute form of cerebral œdema is occasionally very rapid; in some cases the patient has been carried off within an hour from the commencement of the attack; in others it terminates after the lapse of a few hours; in others, again, it may extend to a few days: but whatever may be its duration, we always find the phenomena and characters of cerebral hemorrhage prevailing from the beginning to the end of the disease. It is this form of the affection which you will frequently find described in authors under the name of serous apoplexy: the symptoms of both are very similar; but the seat of the lesion it different. In the latter disease the effusion takes place at the surfaces of the brain, but in true cerebral œdema, as we have already said, the fluid is infiltrated throughout the cellular tissue of the organ, from all parts of which it seems to exude. We have now a question of some importance to ask ourselves. In the actual state of medical science

Can we distinguish Cerebral Hemorrhage from Acute Œdema of the Brain?

Are we acquainted with any symptoms

which separate from each other these two affections, so apparently similar? Yes, we can, except only those cases in which the hemorrhage takes place with great violence and rapidity. The disease then assumes a grave form, and it is by no means easy to distinguish it from cerebral œdema: in fact the symptoms produced are exactly the same, sudden loss of consciousness, coma, long profound stupor, stertorous breathing, and death. Here you see that the functional disturbance following effusion of blood, and infiltration of serum, is the same, and the diagnosis consequently becomes extremely difficult, if not altogether impossible. Thus, as we advance in the study and knowledge of diseases of the nervous system, you see additional reasons for our having rejected the term "apoplexy" from medical nomenclature. If you define apoplexy, as authors generally do, "A sudden loss of consciousness, followed by coma and stertorous breathing &c.," you employ a term of very vague signification, one that suits various lesions of the nervous centres, and is thus calculated to lead you every instant into error. Here, for example, the word "apoplexy," in the common sense, would exactly suit acute œdema of the brain. At another time its definition will comprehend certain forms of ramollissement. At another, simple congestion. The term apoplexy is therefore a vague one, and should be replaced by another which connects more clearly together cause and effect,—the organic lesion and the functional derangement.

Acute and Chronic Œdema of the Brain.

The acute form of cerebral œdema sometimes manifests itself under circumstances which we call technically, metastasis. Thus it has been developed immediately on the disappearance of dropsy in other parts of the body. In one case the œdema followed the sudden disappearance of dropsy in the abdominal cavity. This is a brief history of cerebral œdema in its acute form; let us now turn to this affection when it takes on a chronic character.

Chronic œdema of the brain presents a different aspect from the former; it does not occur at the same period of life; thus the chronic form is more particularly found in old persons, while the acute may, on the contrary, occur at all ages.—in the infant, in the adult, or at the middle period of existence.

In some persons, far advanced in life, we observe a gradual diminution of motility and sensibility. The muscular power and the different faculties give way in a slow manner. The disease never terminates in actual paralysis, but the loss of intelligence, of sensibility, and of the moving power, advances gradually and by slow degrees. All these symptoms are much more strongly marked than they should be from the influence of age on the patient's health, constitution, or mental faculties. Now in these old persons we frequently find after death the characters of cerebral œdema as the sole lesion to which we can attribute the premature decay already mentioned. About two years ago an interne of the *Hotel Dieu* composed a thesis on œdema of the cerebrum, and endeavoured to show the influence of this lesion as an organic cause of mental derangement. The cases which he has cited, establish that certain forms of madness depend on the presence of œdema, either in its acute or chronic stage. We have not now time to enter into further details upon this subject, but such is a general resume of his thesis.

The history of cerebral œdema is, as you may perceive from what we have said, far from being complete or perfect. The truth is, that we possess but a few cases of this affection, some of them very imperfectly detailed, while the rest are not sufficiently numerous to supply materials for a general and faithful description. We have but few observations to make on the

Indications of Treatment in Cerebral Œdema.

The methods to be pursued should, evidently, differ according as the disease may present itself in an acute or a chronic form. A patient labouring under acute œdema of the brain, should be treated on the principles which direct our conduct in cases of active dropsy affecting other organs. Bloodletting, proportioned to the patient's strength and constitution, and to the intensity of the attack, should first be employed. This proceeding may be seconded by extensive revulsion. In the chronic stage we can do little more than apply the same revulsives, with caution and perseverance, according to the circumstances of the case.

NORTH-LONDON HOSPITAL.

CLINICAL LECTURES

ON

DISEASE OF THE HIP-JOINT.

DELIVERED IN 1836,

BY MR. LISTON.

LECTURE I.

(*Continued from page* 15.)

Very false notions have been entertained of

The Pathology of this Disease.

PETIT talks of the ligaments being sodden and relaxed, and BOYER (a very good authority for you to look into), who has published a very voluminous system of surgery,

extending, I believe, to ten or eleven tomes, describes the disease,—and you may guess, from the title he gives to the chapter, that his pathology is not quite correct,—under the title of "Luxation Spontanée ou Consecutive du Femur." I will show you, hereafter, that it is *very seldom that the bone does become luxated in any stage*.

Now, then, we have to inquire, what it is that really takes place in the articulation. I have spoken to you of the signs of this affection, and of the symptoms under which the patient suffers. I have described the form and cause of elongation, the flattening of the hip, the diminution in size, from the absorption of the muscular substance; and I have stated to you that pain is referred along the thigh, to the knee, the course of the tibia, and even to the ankle.

Now, as regards the morbid changes, we find, when we have an opportunity of examining the disease in an early stage, that the cartilage of the articulation is generally absorbed, to a greater or less extent. Ulceration will be found to have taken place either in the bottom of the acetabulum, or in the cartilage covering the head of the femur, and very frequently about the attachments of the round ligament. It is not often that an opportunity is afforded of examining the disease in its very early stage. You find, in Sir BENJAMIN BRODIE'S work on this subject, one case mentioned in which the patient appears to have died soon after the morbid action had commenced. There was observed a slight ulceration of about the size of a silver penny, in the acetabulum, and a small quantity of vitiated synovia in the articulation.

The cartilage, I believe, in those cases is removed, through the action of its own absorbents and veins, and to effect that purpose there is no occasion for calling in the aid of the vessels of the synovial membrane. The ulceration of the cartilage has been said to arise in different ways otherwise than from the surface which is continuous with the synovial membrane; and it does now and then take place from the surface which is connected with the bone, but that is rare. Generally it takes place from its free surface. Some writers lately have been inclined to divide those ulcerations into different kinds,—to distinguish that ulceration which is of a perfectly smooth surface from that which is brush-like and fibrous. I do not know that any good can be expected to result from those distinctions, which I should say are distinctions without any difference. You find that the cartilage does undergo some change before it ulcerates; it swells out, as it were, and becomes soft, then ulceration takes place, and it is removed, as I have said, by absorption, and by the action of its own vessels.

Mr. KEY has lately endeavoured to show that the absorption of cartilage resembles absorption of the dead bone in necrosis. He states, as has been long well known, that the necrosed or dead bone is surrounded by a membrane, which adheres pretty closely to it, and that where there are any worm-eaten appearances in the bones, those holes are filled up, as the bone lies in its bed, by processes of this vascular membrane. Now you will find that wherever a purulent fluid is secreted, there is an adventitious membrane, whether it happens in the structure of a bone, or in a serous or synovial cavity; and there is no doubt (as there is no vacuum in nature) that this membrane investing dead bone lying in a cavity, will swell out and fill the interstices, but I deny that this membrane, or any juice secreted from it, will destroy or remove a bone after it is dead. Mr. KEY cites, as an illustration of his proposition, caries of the teeth, but makes rather an awkward admission for his theory, viz., that dead teeth are never absorbed. Now, if a dead piece of tooth lying in the gum is never acted upon by the absorbents, I really do not see how a dead piece of bone should. But I can show you specimens from cases in which a piece of dead bone has lain in a cavity buried in moisture for nearly twenty years, during which the absorbents had plenty of time to eat it up if they had been so disposed, or able, yet it was found to have remained in the same state in which it was at first placed. Mr. KEY says—"The progress, therefore, by which ulceration of cartilage is in this case effected, is analogous to that by which the sequestrum of the cylindrical bones under necrosis takes place." His premises and conclusions are in my opinion both incorrect. I shall afterwards have occasion to speak to you of this, and will show you that after a bone does become dead, and separated from the system, it is not acted upon by the absorbents.

The cartilages are said to be removed by the absorbents of processes shot out by the synovial membrane; but we find very often that they are absorbed to a great extent, without any discoverable change in that membrane, and in parts which the sound or altered membrane could not possibly come in contact with.

The synovial membrane may, in the hip-joint disease as in other diseases, be primarily affected, but I believe that to be a very rare occurrence.

It is said by some that the fibrous capsule is first attacked; I am not aware that any distinct signs have been observed and laid down, by which that can be ascertained.

So far as I have been able to understand, from the preparations I have seen, from the dissections I have performed, and from what I have read, the disease of the cartilage precedes the degeneration of the other parts. These however will, sooner or later,

become involved—the synovial membrane, the fibrous capsule, the round ligament, and the bone itself.

We find that, as the disease advances, the ulceration is not confined to the cartilage alone; the cartilage becomes completely eaten away, the ulceration extends to the substance of the head of the femur, destroys the neck of the bone, and at the same time a similar action is going on in the acetabulum. Here is a specimen showing disease to that extent, and where no doubt it had gone on for a considerable time. By examining this preparation, you will find a degeneration of all the tissues composing the joint; the fibrous capsule is considerably thickened, the inner surface of the synovial membrane is coated with that adventitious tissue of which I have spoken, a new membrane, which secretes a viscid puriform matter; the round ligament is detached from its connections altogether, and reduced to a mere shred, and the bone itself is considerably affected.

Now I say that, although there is no doubt that in the general progress of the disease it first commences in the cartilages, and subsequently attacks the other parts, yet still the disease may, from some cause or other, have its origin either in the fibrous membrane, or in the bone; but those instances are, I suspect, very rare. In the great majority of cases the disease arises in the cartilages, and thence extends.

Now the first stage of the disease may endure for a longer or a shorter period, according to circumstances. A patient may be labouring under symptoms of hip-joint disease for a good many months, without any such alteration taking place in the state of the joint, as to be perceptible to a person who has not been much accustomed to observe the progress of this malady. The limb may not be lengthened, but suddenly the mischief may be lighted up, and then all the symptoms of the disease will be almost instantaneously developed. The patient can only support himself upon one limb; the other will be elongated, there will be dreadful pain in the parts, and, as I have already said, a marked alteration will be observed in the form of the hip, and in the limb altogether. If the disease be properly attended to, even then, a process of reparation may take place, and the disease may be arrested without any remarkable change of structure. But, again, if no prompt measures be taken to put a stop to the ulceration of the cartilage in the cotyloid cavity, and of the inflammation of the other parts, you will then find that the head of the bone will become so involved, and the acetabulum so increased in size, that the second form of the disease will be speedily established; the limb will become gradually shorter and shorter, and the patient, should he survive, will, to a certain extent, be disabled and deformed for life.

Now you will find on looking into the works on the subject—into that great storehouse of chirurgical information, for instance, the "Dictionary" of our Mr. Cooper, to use a mercantile phrase—and more especially into the papers of Sir BENJAMIN BRODIE in the *Medico-Chirurgical Transactions*, that the shortening is attributed to a dislocation of the hip joint having taken place. It is a common error, a notion very generally entertained. Sir BENJAMIN in one of his Essays says, "In some cases the joint being filled with coagulated lymph, while there is no considerable destruction of the bones, the head of the femur is pushed outwards till it is beyond the margin of the acetabulum, when the muscles pull it upwards, and occasion a dislocation upwards and outwards." And again; "As the ulceration of the cartilages is sometimes followed by dislocation of the hip, &c." He speaks, in other parts, of the shortening of the limb, and of its being in the same state as when the head of the femur is broken off; I believe that now-a-days

The commonly received Notion is that the Thigh is really Dislocated;

that a consecutive dislocation, as BOYER calls it, takes place in the second stage of the disease, and this displacement is made to account for the shortening of the limb. I do not mean to deny that in some cases the limb is dislocated. Sir BENJAMIN BRODIE relates one or two cases where it really seems to have been luxated; and I have, as I think, the great good luck to have a specimen here, for which I am indebted to my worthy friend Dr. O'DONNELL, of Liverpool, in which dislocation of the thigh-bone has really taken place in consequence of this disease, upon the dorsum of the ileum,—dislocation upwards, and a little backwards. The head of this bone has been diminished very much in size; indeed nothing but a part of the neck remains, and the acetabulum is in a great measure destroyed. The ligamentum labri—cartilagineum—is entirely gone, and the bone has formed a new socket for itself, a very shallow one to be sure, in the external iliac fossa. That certainly would sufficiently account for the shortening and deformity of the limb. But, so far as I have seen, the shortening and deformity do not in general arise from that cause. The limb assuredly becomes shorter to a considerable extent, but it is not from dislocation. In one of the specimens, taken from a subject about twelve years of age, which I have already handed round to you, the limb was shortened more than two inches, but still the head of the bone retained its position in the cotyloid cavity; and you will find upon looking at all the preparations on the table, and there are not a few of them, that even where there

has been complete loss of the head and neck of the femur, together with a great change in the condition of the acetabulum, there has been no dislocation. The bone has been drawn up a little by the action of the muscles, and has become a little shortened, but it retains its original relation to the os innominatum in all these cases. You will observe further, where anchylosis has taken place, that still the bone retains its natural position. Here is one preparation where there is not even a vestige of the head and neck of the bone remaining, but still the bone is in its proper place; and the shortening of the limb of course is to be attributed to the loss of substance in the femur, and also to the corresponding destruction of the articulating part of the os innominatum; I have no hesitation in saying that in almost every instance this will be found to obtain.

Here is a very beautiful specimen, taken from a boy who was brought into this hospital in a dreadful state. He was suffering at the time very much from bed sores, as well as from the disease of the hip. You will find his

Case

related in the book. He was nine years of age, and admitted on the 14th of November. Fifteen months before his admission, while at play, he fell on his side. He complained immediately afterwards of pain in his right knee, but no bruise was perceptible. Last April the hip began to swell, he then became lame, and walked on the toe of the affected side, till progression was al together impossible. The hip-joint suppurated, and matter was discharged externally. Since July he was confined to bed. Upon his admission there was pain in the left hip, and some degree of swelling. The leg was permanently rotated inwards, and was, to a considerable extent, œdematous The lower part of the back soon became ulcerated, and discharged freely; indeed the spinous processes of the lumbar and dorsal regions were entirely laid bare. There were also ulcers on the sacrum coccyx and the right scapula. The crista of the left ilium was completely exposed. There was great emaciation, and, as might be expected, excruciating pain on motion. The appetite was, however, good, the tongue clean, and the pulse 120. He was put upon the water-bed of my friend Dr. Arnott, with indescribable relief; water dressings were applied to the sores; they were attended to as much as possible: his strength was supported, as well as it could be, by nourishing diet and wine, and for a time he seemed to rally, but in five weeks after his admission he sank under the profuse discharges that were poured out from his numerous sores, and from intense suffering. Now upon examining the parts, the head of each femur was found in its natural position, although the distortion of the right limb presented the appearance, and would have led to the supposition of displacement having occurred. The head of the right femur was not only completely denuded of cartilage, but the osseous structure was very much destroyed by ulceration. The corresponding acetabulum presented equal proofs of the ravages of the disease. At its inner part it was completely destroyed. In fact there was nothing but the periosteum betwixt the cellular tissue of the pelvis and the abscess within the acetabulum. Several necrosed portions of bone, quite detached, were found in the joint. The ligamentum teres of the left hip was elongated and thin, and there was an increased vascularity and effusion of blood into the synovial capsule, but the ulcerative stage had not commenced.

You will observe in the specimen obtained in this case, and now before you, the great change that has taken place in the head of the bone. The head of it has disappeared entirely, together with a great part of the neck. There is no vestige of cartilage about it. You see that I can push my finger against, and could easily break down, the soft parts lining the cavity of the pelvis. The limb in this instance was shortened to an extent of more than two inches, and that is readily accounted for from the change you observe to have taken place in the form of the articulation. There was here no consecutive dislocation to explain the change in the form of the extremity. I shall next proceed to point out to you the diagnostic symptoms and signs of this disease of the hip-joint, how you may distinguish this disease from paralysis occurring in young subjects during dentition, from psoas abscess and disease of the sacro-iliac synchondrosis. I shall then proceed to draw conclusions from the pathological appearances, and lay down rules for the treatment of this troublesome and dangerous malady.

CURE OF
HYDROCEPHALUS
WITH THE
PROTOCHLORIDE OF MERCURY.

"At the latter end of the month of January, 1810, my youngest son fell seriously ill; I carried him in my arms to his bed, from which within three weeks he was borne a corpse. The disease of *ydrokephalos* (or water in the head) was evidently making its fearful approaches. The usual remedies were applied; and the little sufferer, under torture which I will not attempt to describe, but which can never be forgotten, was sinking every day. Doctors Ainslie and Maton were in constant attendance, but held out not the slightest hope of amendment, and when they took their final leave, what agony could exceed that which tore the hearts of both parents? He was nearly nine years old at his death. A word, only,

to draw the curtain yet closer down upon the departed. My friend Sir B. Brodie, opened the head, and found all the symptoms of the disease of which he had died abundantly verified,—a disease which, I understand, yet baffles the power of skill, or which, if by chance removed, is likely to be succeeded by idiocy." — *Reminiscences of a Literary Life, by the Rev. Thomas Frognall Dibdin, D.D.* MDCCCXXXVI.

To the Editor of THE LANCET.

SIR,—For some time it has been my intention to draw up some account of my treatment of hydrocephalus, in order to lay it before the readers of THE LANCET,—but I resolved *not* to postpone my intention when I read the extract which I give as a preface to this communication. I am aware that this disease has been discovered by the agency of *autopsia*, but not from the cure in our day. It is not to be dissembled that by *autopsia* we can only discover ravages of disease in its last and fatal stage. It is to chemistry that we must look for correct information as to the remote and proximate causes of all acute, and even of some chronic diseases. Witness the results from rational treatment of diseases under the care of accomplished physiologists and pathologists, compared with the empiricism of ignorant and illiterate pretenders, whether with or without purchased diplomas.

Several years ago, observing that, in attending hydrocephalic cases, considerable doses of protochloride of mercury produced, in nineteen cases out of twenty, no effect upon the system, and suspecting the cause, I took the trouble to ascertain what quantity of this medicine passed through the *primæ viæ* in an *unchanged state*, and I accordingly washed the feces of my little patients, and found that the protochloride generally did pass through the system unchanged, not even giving a green tint to the mucus of the bowels. As mentioned by the Rev. Dr. Dibdin, it will be readily allowed by the practitioners of the present time, that hydrocephalus is considered as incurable; so much so, that in instances of a perfect recovery, *neighbouring* practitioners have generally inferred, and often presumed to remark, that, hydrocephalus being an incurable disease, the attendant medical man must have been in error as to the nature of the complaint. Reasoning upon the symptoms of this frightful disease, and holding in remembrance that in my professional career the protochloride of mercury holds a distinguished place as a hydragogue, it occurred to me that, if I could saturate the system with it, I might ultimately remove the disease; and, accordingly, several years ago, I ordered this remedy in *heroic* doses, watching most closely the symptoms, particularly those of the gums, and examining chemically the feces twice or thrice a day. To children, three, four, or five years of age, I ordered the protochloride, in doses of five, six, or seven grains, every three, four, or five hours, and continued this plan, night and day, until the gums became affected. In a word, the gums were my monitors. At the same time I used leeching, cupping, blisters, and sinapisms, as also every other remedy which other medical practitioners have heretofore had recourse to in the treatment of the disease. Of course, at different ages and stages of the disease, the remedies were followed up in a rational and suitable manner. I only give the doses, as stated above, for an outline of practice. I kept the patients under the influence of the protochloride, until the bowels and kidneys performed all that could be desired in removing an excessive quantity of fluid from the system. In some cases one, in some two, and in some three weeks, were passed before any amendment took place. The favourable symptoms of yellow bile secreted in abundance, and of bloody points upon the cloths, were to me agreeable omens of the recovery of the little sufferers. With these symptoms I was always encouraged to augur favourably with respect to the speedy termination of the disease. Gradually the excretions and secretions were performed in a suitable manner; the sense of touch, the use of the limbs, and restoration of the eyesight, followed, and showed that the brain was partly or wholly freed from the disease. I never omitted the use of the protochloride until the cure was completed; but it was always given in modified doses, and proper intervals were fixed upon for taking it.

If there be such a thing as a specific in medicine, I affirm that the protochloride of mercury in the cure of hydrocephalus is one. I state this deliberately, advisedly, and without fear of contradiction. I am well aware that this discovery cannot materially add either to the reputation or the professional emolument of a physician; but I make it known with no less pleasure now that my attention has been thus directed to the subject.

About fourteen patients, in the different stages of hydrocephalus, have recovered by the use of these heroic doses, nor have I ever lost one patient since I adopted this plan of treatment. Most of the cases were in private practice.

The concluding remark from the "Reminiscences" of the above-named distinguished divine, with respect to insanity, as a sequela of hydrocephalus, does not apply to the patients who have fallen under my care, each of whom may justly use the trite phrase, "Habeo mens sana in corpore sano." Long experience leads me to believe that, formerly, when hydrocephalic patients recovered, a portion of the fluid being in some cases left in the ventricles of the brain, insanity was the result; in others, the sutures of the cranium having become separated by the violence of the disease, the head became enlarged, and the patient fatuitous.

Before concluding this paper, I beg to add, that the only cases of croup which have terminated favourably under my treatment, were cured by frequent and large doses of the protochloride of mercury. For the suggestion of this plan, I am altogether indebted to my excellent friend and former teacher Dr. HAMILTON. A few weeks ago, Miss Jane Crow, daughter of F. J. Crow, Esq., of Deptford Hill, near this town, recovered by the agency of this admirable medicine. I may remark, by-the-by, that another infant of the same family, aged three years, had recently recovered from hydrocephalus by the frequent use of large doses of the protochloride, though I was not in attendance until the third stage of the disease. She was blind for a fortnight. In a few days she took 120 grains of this medicine. I remain, most respectfully yours,

W. REID CLANNY.

Sunderland, March 21, 1836.

DIAGNOSIS OF DISEASE OF THE HEART.

CASE OF PLETHORIC INFLAMMATION OF THE HEART,

Presumed to be Pericarditis,

FOLLOWED BY PLETHORIC ENLARGEMENT OF THE HEART, AND HYSTERICAL MANIA, OF THREE YEARS' STANDING; TREATED SUCCESSFULLY.

By JOHN FOSBROKE, *M.D., Physician to the Ross Dispensary.*

In my last paper on nervous, plethoric, and symptomatic palpitations (LANCET, vol. 1, 1835-36, page 620), I explained, in a general manner, my ideas of the influence which the nervous and circulating systems exert over both organic and functional diseases of the heart, and of the practical necessity of viewing these diseases through the medium of morbid action. I shall now give a case of heart disease of the first magnitude, and point out how those views were applied to its discrimination and treatment, which last has been eminently successful, after three years' management, by several esteemed physicians and surgeons to public institutions, and the abandonment of the case by them as incurable.

Case.—The Primary or Acute Disease, in 1831.

On the 27th of May, 1832, Ann Howls, ætat. 16 and above, a tall, ruddy-faced, country girl from Herefordshire, came to me at Cheltenham with a tremulous appearance of the hands and body, an expression of anxiety in the countenance, and distressed respiration. She complained of pain in the region of the heart, shooting to the angle of the left scapula, and of great pain catching her under the ribs in the same region during inspiration. The pulse was not much, but the heart's action was, very visibly, quickened. She attributed her complaint to going from Walford to Ross by night, and "seeing something," which turned out to be the heads of two or three asses looking over a hedge, and biting off the tops. These apparitions frightened her to such a degree, that she roared out lustily for help, and found a violent sensation catch her in the region of the heart. I ordered her to be bled, and prescribed a combination of squill, colchicum, and tartar emetic. On the 28th of May she left a message that she was worse. On the 29th of May she sent for me, and, on going to her, I found that the pain in the left chest was increased; the shock of the heart's impulse was so violent as to be visible. She had fainted in going up-stairs, and at last could not ascend at all, and had had, in fact, several attacks of syncope and increased palpitation. She felt pains in the clavicular and lower scapular regions, which were rendered worse by inspiration; she could lie only on her back, and felt instantaneous sickness, and a load, when she turned on her left side; the heat of chest on that side was very great, and the noise to the ear like that of a saw-mill, and the respiration like a loud rushing sound. On the right side the respiration was natural; the symptomatic fever was very strong; the pulse hard, round, and quick, on the right side, and smaller and more compressible on the left; the expectoration was offensive; the tongue was coated with brown fur; there were herpetic eruptions on the lips. She was bled immediately *ad deliquium*, and the fainting was followed by convulsive motions of the body, of an hysterical character, and by spasmodic pains in the region of the circulating and respiratory organs (which were mixed up with the disease throughout), with a bluish tinge of countenance. A blister of the largest size was put on, and tartar emetic was given, after Laennec's system, in doses of from twelve to twenty-four grains.

At three o'clock p.m., she complained that the pain, which caught her low in the left ribs, was increased, and that she felt a load in the chest, like a great weight. She was then cupped by Mr. Kitsell, druggist, at Cheltenham. In the course of the evening nausea came on, and then a violent purging and vomiting, chiefly of bile, from the tartar emetic.

This girl was bled two or three times afterwards, and cupped a second time, for violent returns of the paroxysms of pain, palpitation, and painful respiration, with decided mitigation of the symptoms. The blood was buffed, and contracted at the edges. The pain did not cease entirely un-

til after the last bleeding; previously to that step, it was less at one time and worse at another, and came on in paroxysms. The symptoms of these paroxysms were, syncope, pain at the scrobiculus cordis and lower bone of the sternum, and upwards towards the left axilla, with a sensation like a flame of fire passing from the heart into the neck. Indeed, the symptoms presented a dubious character, as if partly inflammatory and partly spasmodic, and much hysteria was mingled throughout. The blister was kept open, and antimonial ointment applied. The tartar-emetic solution had been continued, but produced great sickness, purging, and irritability of stomach, bordering on gastritis; after the first two or three days I, therefore, reduced the quantity, and added hyoscyamus, &c. Two-grain doses of opium, with a scruple of calomel, did not produce sleep.

She began, as I have stated, to recover rapidly from the active symptoms after the last bleeding, but, upon attempting to resume her occupation of cook to Mr. Rawling's family, upholsterer at Cheltenham, and to expose herself to the fire, against which I warned her, the pain returned, in a mild form, with fluttering in the chest, like that of a bird (which was relieved by leaning forwards), combined with swelling of the legs, and some hysteric symptoms. I prescribed gamboge, elaterium, and calomel, for her, and sent her home to Ross, for the sake of native air and repose, with a recommendation to Dr. Thomas Evans, then of the Ross Dispensary, and now physician to the Gloucester Infirmary.

The Consecutive Disease of the Heart. Plethoric Hypertrophy, with Dilatation and Hysteria, in 1835.

But the most curious and important part of this case is now to follow:—

Having left me at Cheltenham, she went into the Ross Dispensary, under Dr. Thomas Evans, as "No. 1676, 17 ætat.," recommended by R. Blakemore, Esq., on the 18th of June, 1832, and was discharged on the 16th of August, as a case of "Pericarditis" "Relieved," by cupping, blistering, or bleeding every week, and a bread-pudding diet. She then entered the Hereford Infirmary for three months, under Dr. Waldron, who leeched and blistered her all round the heart. She got worse while she was there, but something better after she came out. She then resorted to Dr. T. Evans again, who went over the same ground with her as before. She was admitted into the *Ross Dispensary*, as No. 1768, Nov. 23, recommended by the Rev. J. Thirkell, and entered as a case of "Hypertrophy of Heart." Her fourth doctor was Mr. Goodrich, surgeon of the 35th Royal Sussex, at Stroud, who gave her asafœtida. Her fifth was old Mr. Minster, at Cheltenham, for about a fortnight, who prescribed the same. She then went a third time under Dr. T. Evans, into the Gloucester Infirmary, who prescribed the fetids, applied tartar-emetic ointment, and put her under a course of mercury, which never affected her mouth. "A cupping of the loins by the house-surgeon, for a pain there, did her heart and head more good than anything else." Her sixth and seventh medicals were Mr. John Wilton and son, who bled her every day for a week, leeched her behind the ears, and gave her medicines for nine or twelve months. The eighth and last, except myself, was Dr. Shute, a gentleman of talent and even originality, whose merit has been as much undervalued and unrewarded as the pretensions of some deep adepts in "that admirable compound of folly and knavery called the world," to use Sir Walter Scott's language, have been undeservedly overrated and confided in for supposed high superior talent. She remained under Dr. S., at the *Lunatic Asylum*, Gloucester, for three months; she was there purged and blistered, sometimes three times a week, at the back of the neck. Mr. Hitch, the house-surgeon to that institution, who is a gentleman of scientific habits, kept her head constantly wetted with vinegar and water, and the room in which she was, sprinkled. She was sometimes vociferous and obstreperous, for which she says she was soused by the nurses in a cold-bath. They are not permitted to strike the refractory, and the plunging bath appears to be an excellent substitute for that mode of coercion. The head is everything at these institutions, and the order of the day was to get down the excitement of the brain, and never to mind the heart. The ironing and washing, the leaning over the soap-suds, and the noise of the mangle, with which she had to do, disturbed the heart; but she left the asylum with a head restored to tolerable tranquillity, and free from a so-frequent recurrence of the fits.

Having gone this round for three years, and more, from one public institution to another, and from one medical "star" to another, she had recourse to me again at Ross on the 20th of July, 1835. I put her into the Dispensary as a case of hypertrophy, and perhaps dilatation.

She stated that, from the time she left Cheltenham in 1832 to that day, July 20, 1835, she had continued subject to violent palpitation, and spasmodic and hysteric seizures. The thumping of the heart was so violent as to raise the bed-clothes, but not so violent when she lay with the head high as when low. She was also affected with a great beating at the top and back part of the head, generally before the coming on of the hysteria. The hysteric paroxysms were so desperate that she could with difficulty be restrained by several persons. She would sometimes bolt out of the

house and run helter-skelter down rugged lanes and over steeps, at the risk of dashing out her brains. These fits were preceded by the most forcible motion of the heart, giddiness, and symptoms of rushing of blood upon the head. They at last deprived her of her reason, and before she went into confinement, she had several attacks daily, but they now came on at intervals of several days. I found that she had never been regular. The first appearance was at 16 ætat.; since that time she had gone over sometimes two, sometimes four, and sometimes seven months; for the last twelve months she had been unwell twice, but for two days only each time.

The pulsation of the heart, in the *left* chest, was barely audible in the axilla; it was not audible under the clavicle; it was more audible from the axilla to the stomach. In the *right* chest, it was slightly audible under the clavicle, breast, and right side of epigastrium. No audible pulsation at the posterior walls of the chest, on one side or the other. According to her own feelings, the pulsation is greatest at the epigastrium, under the left breast, and occasionally at the first bone of the sternum and throat, especially in going up and down hill. The impulse, which is very great both at the epigastrium and between the 5th and 7th ribs, is sometimes most at one point, sometimes at the other. It is most frequently in greatest force at the last point; but attended with the greatest pain and heaviness at the pit of the stomach. The impulse has been such as to shake the bed-furniture!! It repels the stethoscope, and leaves no doubt of the always inordinate, and sometimes excessive, action of the right and left ventricles. The *bruit* is not greater than natural in either cavity, to my ear, but she says it is sometimes audible to herself and others, particularly at getting out of bed, and, when it occurs, she spits blood immediately. The space between the contractions of the auricles and ventricles, is certainly more strongly marked than naturally. As to the rhythm, the left ventricle beats stronger and oftener than the pulse. I find neither bellows, file, nor cat murmur. She is not kept awake at night by the most violent palpitation. (July 20)

I determined on a plan of treatment more comprehensive, more varied, and more decisive, than the previous methods of the "Nobs" who had gone before me.

July 20. Commenced with a combination of squill, aloes, soda, and sulphate of zinc, but as pills make her vomit, she was obliged to give them up, and took, instead, three-drop doses of hydrocyanic acid, combined with scruple doses of tinct. lyttæ, and two simple doses of wine of ipecacuanha. Enjoined to lie on her back, and eat no more food than was sufficient to preserve life, and to drink nothing but slops; a commandment scarcely called for, as the girl ate next to nothing.

29. Palpitation the same; three tremendous fits, but at longer intervals than before. One scruple doses of chenopodium ollidum, and two scruple doses of tinct. aloes, to be added to the hydrocyanic mixture, to act upon the uterus, as a certain period was approaching. As the monthly warning passed over without any appearance, I left both out on the 3rd of August, and substituted half-grain doses of tartar emetic. To be cupped every week. Head better, but heart the same.

Aug. 9. Heart acted upon by the hydrocyanic mixture; palpitation so much diminished, that she can hardly hear the heart beat. Ordered to go on until she does not know that she has a heart. Has lain on her back, as she was ordered, the greatest part of every day, and would have laid the whole day, if the people about her would have let her. No hysteric paroxysm for a fortnight; then a more violent fit than for the last six months. Leeches and blisters to the upper part of the thighs; hot pediluvia to bring down the catamenia if possible.

12. Palpitation, pulsation of carotids, fluttering at the sternum still violent in going up and down hill. Giddy from not being cupped as usual once a week; therefore to have a seton. Catamenia not yet reproduced by the remedies: on that account turpentine enemata to be thrown up twice a day.

14. The catamenia has come on without the turpentine injections. Palpitation increased by the usual excitement of this condition, and going up and down the Dock-pitch: therefore one grain more of tartar emetic to the mixture.

16. Hysterical globus; pain of epigastrium and left side under the ribs; and pain and extreme tenderness of the whole abdomen, increased by pressure, which prevents her lying in the horizontal position; breath short, from the pain of the stomach; pain under the scapula and along the left arm; mind wandering. Twenty leeches to the seats of pain. Valerian and nitrous ether to be taken occasionally.

22. Pain of epigastrium the same, but pain of left side greatly relieved by the leeches; globus, palpitations, loss of mind twice a day, formerly nine times a day. Turpentine injections used, but have no effect except in increasing the secretion of the kidneys.

24. Better in all respects, but Marianne Addis, who slept with her, says she could distinctly hear the heart pulsate, and that the heart beat three times for the once of the pulse at the wrist; head better; epigastric pain not so violent; now for the first time an eager appetite for food. But, on this very evening, she had a two-hours' fit, probably from going over the day without

her regular cupping. Eight leeches and blister to the upper part of the thighs.

26. Cupped to ʒxviii.

28. Heart much more regular; epigastric pain less, but pain of left side violent when lifting or heaving. Does not eat so much as two biscuits a day; can eat a little fish, but no meat. Liniment of mercurial ointment, iodine, and croton oil, to be rubbed upon the chest; dose of tartar emetic to be increased, and the hydrocyanic acid to be augmented to four drops twice a day.

31. Threatenings of a fit. Cupped therefore to ʒxii. The heart beats less, but she hears a sound like a file, when she lies on her back with her head low, or when she is startled, or exerts herself more than usual, particularly in going up hill.

Sept. 2. Her head has been so quiet that she has had no beating in it except at getting up in the morning; every pain better; thinks "the seton has done her a wonderful deal of good."

4. Palpitation again for half an hour at a time; violent pulsation at the back of the head, with a feel as if the occiput were opening and shutting; increased pain of epigastrium, and pain in the right hypogastrium; disposition to hysteria, and much mobility exhibited, by restlessness, fidgetting from place to place and thing to thing. To use the shower-bath, which relieved her.

5. Two violent attacks of palpitation and beating in the head at rising and before noon. Shower-bath again. These attacks probably owing to the approaching period.

7. Light-headedness, but heart very quiet; afraid that a child with chin-cough has infected her. Cupped to ʒxii; four shower-baths a day.

9. Her month gone round; crural leeching and blistering; hydriodate of potass and turpentine given without the desired effect. Again affected with pain of left shoulder and arm.

11. Some catamenial appearances, but with a disturbed state of brain, globus, and, as often before, a disposition to suicide; pain under left arm; uneasy respiration and file noise continue. These symptoms have followed a violent cold, and accompany chilled legs and skin. She still thinks the heart is a great deal improved, and that I shall cure her.

14. Beating at the back of the head, and the feeling as if the head was being burst open at that part, by some force from within. Bled to ʒxiv by Mr. Gwynne.

15. A two-hour's fit, but muscular convulsions not so violent as formerly; lies more lifeless than usual after it; all the morbid sensibility of the skin, and particularly about the seton, for which she was always wanting me to pull it out, took leave after this fit. She spat blood before the last and other fits. Has beating under left scapula and along the left arm.

20. Violent action of the heart, with the spitting of a good deal of blood, and beating of the back of the head. Ten leeches behind the ears. Symptoms ceased at middle day.

30. Two fits in one week, but formerly had nine per day for nine weeks; found when they were coming on, by the globus, and icy coldness of feet, and extreme heat of head. Put her head under a pump, and got it pumped upon to lessen this heat, which has always been very great. The heart palpitates during these fits, but the impulse and other important symptoms of enlargement have long since vanished, and the seton has been withdrawn. The last fit was caused by a foolish body running in with a cock-and-bull story about a sudden death. She has not been cupped or leeched very lately, but has used the shower-bath, and taken squill floated on compound elec. of aloes.

Oct. 12. No fresh fit, but full of hysteric feeling; great palpitation without impulse; excessive beating of the innominata, evidently connected with, if not caused by, the hysteria, with noise in the head, as if some one were blowing into the skull and into the right ear, with discharge from the right ear, wherein she has been deaf since her head was first affected. She ought to have been regular on the 11th, but has not been so, and has been affected for some days with pain in the right ovarian region, swelling in both ovarian regions, morning weakness, and œdematous legs, like the first signs of interrupted catamenia from pregnancy, but not uncommon in hysterical subjects; head light and wandering. Leeches (xii) and blister to the thighs; large doses of hydriodate of potass, with the tr. cantharides, to no purpose.

20. Head much affected, and mind so irritable, that she can only relieve herself by stamping, vociferating, and cursing lustily at every one who comes near her. In this state she hurried, of her own accord, up to town (the carotids pulsating so violently as to be remarked by people in the street), and got bled to ʒxvi.

27. Lost ʒxxii more blood, the blood spurting up to the ceiling, and scarcely to be stopped. To take 60 drops of tr. digitalis in the day.

28. On came the palpitations, but without impulse, for the disease, "when it does not attack one part, makes at the other, the head or the heart;" extremities too cold, and all the rest of the body too hot; morning sickness; pain of right hypogastrium and swelling of legs continue. Has been without a fit longer than usual, which she ascribes to a bleeding in the foot.

Nov. 16. More than a fortnight without bleeding. Has had two fits at the Dock-pitch, for which some people first swilled her with cold water, and then thinking it "would give her her death with cold,"

choked down some rum, which caused a violent rush of blood to the head, and raving madness. After three days' insanity, and driving about the country and bouncing about the house, I prostrated her with tartar emetic in strong doses. The moment she attempted to rise in the bed, it made her so wretchedly sick, that she was glad to lay down her head and be at peace. Under the action of this agent the catamenia came on, and the mental excitement began to lessen greatly. I now kept on plying her with 5 grs. of hydriodate of potass, 15 drops of tinct. digitalis, the same of tinct. hyoscyamus, and 4 gr. of tartar emetic, three or four times a day. This invaluable combination has always had the effect of "killing her," as she terms it, "for half an hour," by suspending the action of the heart, pulse, and respiratory organs, nay, almost suspending animation.

Nov. 27 to Jan. 25. The violent palpitation, with spitting of blood, and the file noise in going up and down stairs, which had all returned, were removed by this remedy. On the 27th of November she appeared convalescent, for there had been no palpitation, no determination to the head, no fit, and no signs of fulness. From that date to the present time (January), she has continued to improve, and has become perfectly regular,—a circumstance which she had never known in her life. If she feels her head or heart menaced after chills, or nervous, or mental shocks, she has recourse to half doses of the last medicine, and wards off all mischief. She now thinks of going to service in the spring.

Remarks.

I shall pass over the acute attack, whether congestion of the internal membrane and substance of the heart, or inflammation of that membrane, or pericarditis, until I come to Mr. Gwynne's case, which was similar.

Before she left Cheltenham, I cautioned her mistress that if she returned to cooking, and exposed herself to the stimulus of heat, she would have a renewal of disease about the heart, and it so turned out. She departed with symptoms, in her own words, "something like a bird fluttering with both wings on the chest, particularly at the pit of the stomach more than at the side of the chest," with "inability to lie on the left side for a moment for the continued cough." These signs, which, so far as their equivocal nature admitted, both I and Dr. Evans interpreted into mild and subdued pericarditis, soon made a transition into the established form of enlargement of the heart by thickening, if not dilatation. Everywhere that the muscles of organic life are in contact with an inflamed membrane, whether mucous or serous, they have a remarkable tendency to become the seat of a more active nutrition,—that is, to hypertrophize. But increased determination of blood (to which and plethora I ascribed this disease), can of itself produce only congestion of the heart. It can never cause hypertrophy, unless when aided by a corresponding increase of the assimilating powers of the part, and an increased exercise of the functions of the affected organ. (*M. Andral.*)

Speaking of these transitions, Professor Andral observes, that the practitioner ought to investigate the least symptom after apparent convalescence, and never cease from combatting the enemy, so long as he offers the least sign of his presence. If there be merely a slight pain in the heart's region, with some fever, and a respiration not free, he should not stop short of the last requisite and decisive bleeding. An arrest, an amendment, or a suspension of the disease, may have been effected, but the inflammation may return, or the disease may pass into a chronic state. Howls might, or might not, have wanted this final security. It is my opinion that excess of nutrition and sanguification were the predisposing causes of heart disease, both in Howls and Mr. Gwynne.

Irregularity and deficiency of the catamenia is one of the principal causes of plethora in women. (*M. Martinet.*) The want of a proper development of this secretion, and the consequent retention in the system of an excess of the circulating mass, from sixteen years of age, to the period of her recovery, greatly conduced to, if it was not the one great cause of, redundancy and morbid determination. Professor Macartney remarks, that suppressed secretion of the uterine surface will produce the most violent action of the heart. Nothing could show more strongly the importance of the periodical uterine function, and the necessity of re-establishing that function, if possible, than the exasperated excitement of the heart, the disturbance of the brain, and the recurrence of the fits on or before the catamenial effort. She noticed this circumstance herself, but laid some of the blame upon the moon.

Another cause of plethora was a change from the free out-of-door habits of the country to those of a being "in populous cities pent." Howls goes out of Herefordshire to be impounded in the kitchen and kitchen-area of a Cheltenham dwelling-house. Mr. Gwynne was sent early in life from the range of a homestead to that of a druggist's counter at Newport. The symptoms of irritable heart quickly followed this change, and he was cured by a temporary return to home and agricultural occupations. In 1835-6 he is confined to Mr. Bellamy's shop at Ross, and he has three pericarditis and one pleurisy within less than a year, and can only convalesce with the help of enlargement, change of air, and open exercise. There are few of

our "vulgar country constitutions," like Lydia Melford's, in Humphrey Clinker, "reared among woods and mountains," that can bear the *rus ad urbem* change, and the consequent change of habits, without more or less injurious results. Dr. Parry's peculiar doctrine of nervous diseases springing from irregular circulation, caused by "the defect of due exertion of the voluntary muscles" and morbid stimuli,—and Andral's maxim that "too much food, while the body loses too little by exercise, gives a disposition to inflammatory diseases," apply with felicity to certain morbid actions of that great involuntary muscle, the heart.

Howls's kinsfolk, seeing that she ate little more than two biscuits a day, and yet required perpetual bloodletting, were always bothering me with the question, "How she could make so much blood and eat next to nothing?" "What is the use of your chaffing," was my answer, "when she is plainly one of those, who would starve, like a Scotchman, upon oaten bannocks and porridge, or, like a Muscovite, upon the bark of a tree, and yet carry a 'purple regal stream' in her veins, full to overflowing." During the three years and a half that she went from Cheltenham to the *Ross Dispensary*, from the *Hereford Infirmary* to Stroud, from Stroud to Cheltenham, from Cheltenham to the *Gloucester Infirmary*, and to the *Lunatic Asylum* in that city, and thence to me, she lived a continual life of bloodletting, cupping, and leeching, day by day, or week by week, and "she was never so happy," she says, "as when she was going to be bled." Most times, when she had let the customary week-day for bleeding go over, her carotids commenced beating, her temples throbbing, and "the back of her head felt ready to split;" as if the blood, interrupted in descending from the lateral sinuses, distended the skull; then out she would sally, in terror of an hysteric paroxysm, without any instructions, and have blood removed. Hydrocyanic acid, digitalis, ipecacuanha, and neutral salts, and all kinds of sickening and depressing agents, in strong doses, did not avail to prevent sanguification, and the necessity of depletion. A glass of wine she could bear, but any quantity of spirit and water drove her mad. It injected and excited the vessels of the brain, and overwhelmed her mind before the critical amelioration of the end of November. Dr. Macintosh gives an extreme case of hypertrophy, which was treated in a manner worthy of his talents. The man, notwithstanding bleeding and antimony, began to increase in flesh and strength as soon as the antimony was omitted, after which "he had perseverance enough to live for a considerable time on two biscuits a day." Thus, while there are some who look as if they were made before blood was in fashion, there are others who will become redundant upon a diet of bacon-rinds and cheese-parings, and so are subject to a condition, which is one of the greatest misfortunes of life.

Such were the circumstances that showed the disposition to excess of sanguification; and I consider that the excessive quantity, and rich, fibrinous, and stimulating quality, of the blood, by producing accumulation in the cavities and over-stimulation of the heart, was the exciting, but not the sole exciting cause, of the disease. I revert to what I said, in the preceding paper on palpitations, on the mixed nature of the morbid action. I see an acute attack presenting the most violent symptoms of pericarditis. During that attack she has spasmodic seizures, and disturbance of the brain of an hysterical character, combined with the effects of increased vascular action, and ever and anon re-excited to exasperate the palpitation and more fixed symptoms of inflammation. The acute attack is subdued, and she is subject for three years afterwards to palpitation, with impulse, and the characters of hypertrophy, if not dilatation, which coincides with a disposition to make blood in excess, and, consequently, to become subject to engorgement of the heart's cavities. But the acute attack, like two of Dr. Parry's cases, the one pericarditis, the other another affection of the heart, was brought on by terror, and the consecutive disease of the heart was always aggravated by every unhappy circumstance that could operate on the mind, and little else had she but such circumstances to encounter. I look not to the mere material change from a thinner heart to a thicker, from smaller cavities to larger, to a doctrine of mechanical obstacles, nor exclusively to an engorgement of blood, but I hold fast by the precept of Professor Macartney, that in studying the diseases of the heart, we should regard not "morbid structure alone, but morbid action in connection with morbid structure."—(*Notes of Pathological Lecture.*) I see in this case the plethoric condition of the heart accompanying "that condition of constitution which is usually called nervous, in which the heart is peculiarly disposed to be affected by the whole train of mental emotions," in which "the effect of blood on the action of the heart is not always proportioned to the absolute quantity, but often to the previous circumstances of the heart itself," and the co-existence of what "is called the nervous constitution." It is also well remarked by M. Andral, that not only will a plethoric state produce excess of action and palpitations, and, by prolonging the excess of the heart's action, hypertrophy, in the same manner as violent exercise will cause increased thickness of a muscle, provided there be a disposition to increased assimilation, but that a vice of the nervous influx will produce the same effect

with force and irregularity, in like manner as it produces the most disordered movements of the life of relation. Now I regard the plethoric state and vice of the nervous influx, not as existing separately, but in combination, in Howls's case, and the palpitation not merely as an effect of thickening, but symptomatic both of it, and plethora and hysteria.

The redundancy of blood and excessive action of the heart in a state of hypertrophy, added to the irritable, and perhaps congested state of an irregular uterus, produced throbbing carotids and morbid determination to the head. "No fact is better ascertained than the influence which simple hypertrophy exerts in producing apoplexy and softening of the brain." (*Dr. Mackintosh.*) Dr. Craigie has reported cases of combined disease of the heart and brain. (*Edinburgh Medical and Surgical Journal*, No. 74.) Dr. Hope, whose work I have not yet had the pleasure of reading, has pointed out in how great a proportion of cases, apoplexies follow hypertrophies. Dr. Parry, indeed, had described the violent pulsation of the carotids in cases of enlarged heart, with a tendency of the thyroid gland to enlarge, and so divert the blood from the brain; and Mr. Abernethy had observed, that in aggrandizement of the heart's substance, with aggrandizement of its action, the pulse is enlarged in its diameter, the carotids pulsate, and both are dilated, to carry off the quantity of blood forced upon them; Professor Macartney also has noticed the fact that inordinate action of the left ventricle will produce apoplexy of the right hemisphere, by forcing upon parts not meant to receive it. M. Andral remarks, with great correctness, that the consequences of an hypertrophied left ventricle, with unaccustomed energy of contraction, are afflux towards the head, from the disposition of the arteries which carry the blood there, puffs of heat ascending into the head, swimmings of the head, and active congestion, whenever palpitation is felt. A great degree of congestion may be announced only by headache, vertigo, and swimming; a second degree, by a complete loss of consciousness, and all the symptoms of cerebral hemorrhage; and, lastly, effusion itself and apoplexy. When these symptoms of active congestion are dissipated very promptly under the influence of copious bleeding, it becomes very evident that there existed in the brain only a momentary plenitude of the red capillaries, without hemorrhage, but, in the other case, there is a real effusion of blood. In Howls, the increased palpitation, the spitting of blood before the fits, the pain under the left scapula along the left arm, all which precede accumulation of blood in the heart's cavities (*Dr. Parry*), and then throbbing carotids, bursting distension of the lateral sinuses, and hysteric paroxysms, evince a connection between fulness of the heart, and active congestion in the lungs and head. Imperfect or unaccomplished uterine efforts at the catamenial period were the forerunners of increased palpitation, and morbid determination to the head, and the signs of a want of balance of the circulation, arising from the blood not being directed in its natural course by the regular fulfilment of the uterine function. "Suppressed secretion of the uterine surface will produce the most violent action of the heart, and, if efforts are made to reproduce the secretion which fail, it will become still more interrupted" (*Professor Macartney*).

Dr. Parry has shown that palpitation long continued will produce determination to the head and hysteria in females, and epilepsy in men. The plethoric hysteria of Howls, which was the most formidable and rebellious symptom which I had to combat in that case, was that kind of disordered nervous action to which her constitution, like other nervous constitutions in females, was prone, and was excited principally by irregular circulation in the brain, and uterine irritability. The hysteric attacks lessened in violence, frequency, and duration, in proportion to the progressive improvement of the heart's action, and ceased altogether when palpitation and morbid determination were wholly removed, and the irregular and deficient catamenia restored. But though the fits were preceded by cold feet, and the symptoms of congestion of the heart and chest, it is equally true that tumult of heart sometimes followed, as well as preceded, the hysteria, and constituted the nervous palpitation symptomatic of hysteria, together with the palpitation of a plethoric and enlarged heart. In a case of hysteria, treated by Dr. Roe of the Westminster Hospital, we find violent action of the heart, and intense pain of precordia, forming an excellent counterfeit of heart disease. When blended with actual disease of the heart, as in Howls, it is a source of great ambiguity and difficulty in adjusting what belongs to the morbid sensibility of hysteria, and what to the organic disease.

The acute pain of the epigastrium and left side at one time, of the ovarian regions at another, with interrupted catamenia, œdema of legs, and morning sickness, and the morbid sensibility of the skin around the seton, the whole of which disappeared after the great fit and consequent amelioration of the 14th of November, were nothing more than high hysterical irritation, assuming the painful character of inflammation. Sauvages has described the hysteria stomachica, Dr. Wallace, an abdominal hysteria, which mimics peritonitis, and which was once so mingled with inflammatory symptoms, in the case of a female at Cheltenham, as to induce me to carry bleeding farther than

was necessary, though safe. Dr. Macleod has given some observations on such cases, condemnatory of bleeding, but I have found leeches afford decisive relief, as in Howls's case.

Mr. Gwynne's case, which is a similar one of the first magnitude, will give me an opportunity of commenting on many interesting individual symptoms of heart diseases, which I shall now omit.

With respect to the diagnosis, Dr. Thomas Evans told me at Ross, in August 1835, that Howls's was a case of hypertrophy, with dilatation, and I have a strong impression on my mind, that, in the preceding summer, he stated the existence of valvular obstruction. The impulse at the third bone of the sternum, and, according to her own account, sometimes as high as the first bone, and, when going down hill, as high as the throat, and the impulse between the fifth and seventh ribs at the left mamma, were certainly indicative of hypertrophy. In the first three examinations I found the pulsation but little, if at all, more extended than in the healthy condition of the heart, but it was audible in the right chest, a circumstance common in phthisis and other diseases of the lungs, and originating from other causes than dilatation. On the fourth examination I discovered increased pulsation under both clavicles, and there might be "that remarkable increase of cavity which exists with increased thickening of a hollow organ." (*M. Andral.*) The *bruit* might either indicate dilatation or moderate hypertrophy. The *rhythm* was not that of the last degree of hypertrophy; I discovered no signs of contracted orifices or obstructed valves, but one day that she was sitting in a chair, and two ladies came in, she was flurried by their presence, and I, who was sitting a couple of yards off, heard a sound proceeding from the sternum; the females, who were quite as close to her, could not hear it, such a difference does the use of the stethoscope make to the ear. She told me that when the heart was very irritable, when she walked up hill, or when blood was crowded, through emotion, into its cavities, or, particularly when she first awoke in the morning, and changed the lying-down to the upright posture, this noise would come on, and that it resembled a file. As the presence of impulse is no infallible sign of hypertrophy, since it occurs in nervous palpitation, so the absence of impulse is no certain criterion of the non-existence of hypertrophy; thickening of the heart and its parietes is not the only condition necessary to produce impulse, its fibres should contract with energy, which does not necessarily and regularly result from increased thickness. Hypertrophy of the ventricles, with enlarged cavities, and simple hypertrophy of the left ventricle, with great diminution of its cavity, may exist without impulse. On the other hand pericarditis, a plethoric state, or a modification of the nervous influx, may produce that force of the heart's beat, and the bruit, rhythm, and extent, which are significant of organic lesion, when no organic disease exists. Though the extent of the beat of the heart is proportioned in most cases to the volume of the heart, and remarkably to the dilatation of its cavities; yet in a great number of cases of enormous heart, the beat has been circumscribed to the precordial region, to the bottom of the sternum, and below the left clavicle. The heart may acquire a very considerable volume, and its cavities may be very much enlarged, and nothing unusual pertain to the beats of the heart; they may be even less than in health. (*M. Andral.*) After weighing deliberately all these sources of fallacy, and allowing them their full weight, I concluded that hypertrophy, and probably dilatation, existed, because the stethoscopic signs had been durable throughout, and concurrent with other signs,—and because the epoch and mode of appearance of those signs, and of the different morbid phenomena accompanying them, were really characteristic of organic disease. The file as well as the bellows-sound coincides, in a certain number of cases, with an obstacle to the free passage of blood through the heart's cavities, but they may also exist with or without obstacle, and depend sometimes on a more considerable quantity of blood than usual surmounting the orifices of the heart. To this last cause, as the file-sound was not permanent, I ascribed that sound in Howls's case. Mr. Abernethy says that thumping of the heart against the epigastrium, to discharge its contents, is the principal symptom of ossification of the tricuspid valve. (*MS. Notes of Lect.*) Andral observes that in the healthy heart, the beats are but little sensible at the last piece of the sternum and ensiform cartilage, and in one case where it was sensible, without *bruit* or impulse, the right auricle was enormously dilated. I have dwelt minutely on the diagnosis, for in diseases of the heart, above all others, a man should be able to give a reason for the faith that is in him. We should never forget that "affections of the heart may be manifested, and the affection not exist; and, on the other hand, a very grave affection may exist, and not be revealed by auscultation." (*M. Andral.*)

Treatment.

The practice in these cases is regular Sangradoism. "Ce marveilleux secret est renfermé dans ces deux points, dans la saignée, et dans la boisson fréquente. * * * Qu'il ne faut que saigner et faire boire de l'eau chaude. Buvez de l'eau abondamment. * * * le cours de sang, est il trop rapide, el en arrête l'impetuosité." Very true, and "de l'eau chaude qui n'a pas bouilli; car

j'ai observè que l'eau, quand elle a bouilli, est plus pesante et moins commode à l'estomac!" In other words, all things cold are the rule in heart cases, because warm excite palpitation. If there are those who impeach this practice, there are, like Sangrado's rivals, who could expose his failures, but could not show their own success. More cases have been lost by the pigmy school, from sparing the bleeding and water system, than were ever killed by the abuse of it. English practice in diseases of the heart has been feeble and unsuccessful. Even Parry, who was called the Sangrado of Bath, said that palpitation of the heart with organic disease was always fatal; and Baillie observes that he has known two cases where the enlargement was stopped at a certain point, and the increased action of the heart subsided, but such a fortunate issue was very rare. I have myself seen cases treated by what are called "Nobs," which, I think, terminated in a speedy interment, from want of energy. Some of us manage matters better now. "In cases of accumulation of blood in the cavities," said Parry, "keep the habit in a state of depletion, and repress as much as possible the action of the heart and arteries." Vasalva and Albertini have reduced the plan to system, and pursued it with great energy and success in angina, hypertrophy, and aneurysm; and Pelletan has profited by bleeding and starvation in the last class of affections. Macintosh takes the same course. It was by this system that I reduced an aortic aneurysm to a passive state, and restored the patient to health and labour, in the case of John Marshall, reported in THE LANCET, April, 1835. I adopted the same line of practice in Howls's acute attack. The infirmary physicians and surgeons took it up where I left off, and I again, in turn, readopted it; for she "was never so happy as when she was going to be bled;" and Marshall, weakened by morbid determination, "was never so strong as after being bled." But there are objections to the practice. I wish to dispense with it, if I can find a substitute, and I have some hopes that I have found one.

I observed the proportion between the clot and serum, and ordered a watery diet, *a la Sangrado*, that less fibrine might be formed, and the inflammatory disposition, promoted by too much food, while the body loses too little by exercise, be prevented.

I considered Dr. Parry's rule of keeping the habit in a state of depletion, too limited and exclusive. Physiologically and therapeutically the disordered nervous action, combined with disordered vascular action, ought to be taken into full account. In Howls's case, the hydrocyanic acid in three-drop doses, combined with Battley' solution, tartar emetic, and other nauseants, and occasionally with the fetids, to soothe the nervous symptoms, formed a very essential and prominent part of the treatment. The tartar emetic was increased to a considerable quantity before it nauseated. This combination produced the first decisive impression on the heart, and stilled it within a fortnight.

As the heart has a tendency to grow, from diseases which render it liable to congestion, so hes violent exercise, which increases the quantity of blood passing through its cavities, a tendency to promote that growth. This is seen in our labourers, in whom heart diseases are frequent. The increase of the arms and legs, in cases of plethoric palpitation, will throw too much blood upon the heart; but not only does muscular exercise, which returns the blood with more than usual momentum, excite excessive action on that important organ, but mental irritation, long exposure to heat, the indulgence of the passions, the causes of fever, and various causes acting on the alimentary canal, as stimulating food, accumulations of feces, flatus, and other powers, by a mode of operation which is inexplicable, cause unusual fulness and impulse of blood upon the heart. (*Dr. Parry.*) Lying long in bed, thin-clad legs and feet, and brooding over the disorder, are equally hurtful. I compelled Howls to keep strict to repose and all these rules, so far as a woman's restlessness and the foolish interference of others, and their indifference to reason, would permit. It was gratifying to me to see how the heart gradually came down from violent pulsation and impulse to the natural and proper beat, and the feeling that "she had not a heart in her body." Some, says M. Andral, at the moment of coming into the hospital, present at the precordial region or elsewhere unusual beats in respect to force, bruit, rhythm, &c. But under the influence of a rational treatment, and particularly repose, the first condition of the success of the treatment, the signs presented by auscultation become less and less audible, and at last completely disappear.

As soon as I got the heart under control, I looked to the restoration of the uterine functions, which is a most important point, and always difficult to achieve. I pursued periodically the system of derivative bleeding and blistering, and administered turpentine by the mouth and by injection. Professor Macartney remarks, that in a febrile and dry state of the body, a quantity of cold water thrown over the body will often reproduce the suppressed secretion, and the pulse will drop twenty beats at once. The shower-bath was continued partly with this intention.

But the regular establishment of the catamenia for the first time in her life, the departure of a tenacious and habitual hysteria, at the height of maniacal excitement, the change from morbid determination to a

regular state of the circulation, and the setting in of a steady convalescence, were coincident with the action of large doses of antimony, and kept up by the combination of hydriodate of potass, digitalis, &c., already spoken of. In nervous, uterine, and biliary affections, I have obtained such results from hydriodate of potass, that I consider it a remedy of the very first utility. After the action of this combination on Howls, and the removal of a third pericardite in Mr. Gwynne, and of three inflammations of the chest in others, by similar powerful combinations without venesection, I have conceived the hope of being able to communicate such "bons moyens" as will limit, if not, in many cases, supersede, blood-letting in inflammatory states of the heart and thoracic viscera.

The shower-bath possesses a sedative power, which is a partial substitute for bleeding. The French use it as a last resource in diseases of the heart, and consider it as frequently successful after the failure of all other means. It was useful in Howls's case, and has since been beneficial to Mr. Gwynne.

The seton obviated the necessity of a great deal of Sangradoism; it was beneficial in Marshall, the case of aortic aneurysms. Dr. Jeffrey of Liverpool has given a long-standing case of palpitation, in a student, supposed to be symptomatic of organic disease, from which the patient recovered after the use of a seton.

Though I have seen with joy the subjugation of a mighty disease, after the case had been turned out as incurable from under so many stars in our particular hemisphere, I am nevertheless aware "that organic diseases of the heart generally last through life, and functional generally disappear; that the prognosis is always unfavourable; that the symptoms are generally suspended for a time, and then relapse, and terminate fatally." (*Professor Home.*) In organic disease nothing is more common than periodic returns. The general cause of these returns is cold, and dry cold, by contracting the circumference of the body. The blood, which permeates the capillaries under a soft temperature, flows back towards the centre, and, if an obstruction exists, it becomes relatively greater through the more energetic efforts of the principal organ of circulation. (*M. Roslan.*) Howls at this moment (Feb. 8) has a return of slight palpitation, with impulse, pain of brain, and hysterical nervousness, and chilly extremities from walking too far, and getting wetted through her boots in the snow. Macintosh's waterproof, and all other means that can preserve the balance of the circulation, are necessary to such people.

Ross, Herefordshire, Feb. 1836.

OPENING OF THE BRACHIAL ARTERY

IN BLOOD-LETTING, AND HEALING BY COMPRESSION.

Vincent Petiel, aged forty years, a printer, was admitted at the *Hôtel Dieu*, Paris, under the treatment of M. Sanson. He had fallen from the stair of his residence, upon one of the last days of the month of December, by which he received contusions upon the chest, the knee, and the right foot; and also a small wound upon the integuments of the face. He entered the hospital on the 31st of December. The pains which he experienced in the chest, particularly on movement of the intercostal muscles, the strong pulse, the injection of the capillaries of the face, and the robust constitution of the patient, showed the necessity of general blood-letting. Resolutive remedies were employed upon the contused parts, and bandages over the chest, in a serrated form, were employed, until the pains of the chest were removed. Blood-letting was performed on the 1st of January. Two prickings had been made by one of the hospital pupils in the median cephalic vein, from which only a few drops of blood were obtained. He pricked the median basilic vein, placed a little to the outer side of the artery, the pulsations of which were perceived. This vein was very superficial and voluminous, and much distended. Immediately after the puncture was made, the blood spouted out with violence over the bed, the assistants, and the operator. The jet was readily directed to the vessel intended to receive the blood. The blood was brisk (*vif*) and strong (*fort*), it was also jerking. This fluid was red, lively, and frothy.*

These characteristics of the jet of blood were sufficient, without doubt, to make known that an artery was opened, but it was needful to be assured of this. The vein was compressed below the puncture, and the jet diminished in volume, but the force was not diminished. The nature of the blood was not changed in appearance. This was put to the proof. The brachial artery was compressed between the opened portion and the heart. The jet diminished in volume, it was no longer jerking, but showed a sustained arch. Above all, its force and extent were diminished. The nature of the blood was not the same. It was dark and less frothy. In a word, it had now assumed the characteristics of venal blood. After having twice made these proofs, and obtained the same results, it was needful to act as if the artery were open. A plug

* "Frothy," from the atmospherical air which it contained as arterial blood (?)—Ed. L.

(tampion) was applied upon the orifice from which the blood flowed, upon which such compression was made that the pulsation of the radial artery could scarcely be felt, and over the traject of the brachial artery a compress of many folds was passed, and the whole limb was surrounded by a rolled bandage methodically applied, and continually moistened with water. Every two days afterwards, from the 8th to the 14th, the applications were changed, and they were laid aside on the 18th.

Nothing worthy of record took place except itching, pimples, and a slight scurfing of the fore-arm, which were consequences of the long-continued application of compressive bandages. These soon disappeared. The patient experienced no difference between the arm operated upon, and his other arm. He remained in the hospital until the 10th of February, without any change occurring in the arm. No unfavourable symptom afterwards took place, and although he was seen several times afterwards at the *Hotel Dieu*, the impression was, that his recovery on this occasion was perfect, in every sense of the word.—*French Med. Jour.*

*** If we mistake not, life has often been lost in cases coming under the denomination of "cerebral congestion" (apoplexy) "pulmonary congestion (apoplexy)" from a difficulty of removing a sufficient portion of blood from the system (the case of the late Lord Holland was probably an instance in point), although myriads of leeches may have been applied as well as cupping, and although the temporal artery has been (unsuccessfully from its small size and position) attempted to be opened. Why not at once open the brachial or its branches, the cubital, or the radial artery?

ABSENCE OF THE EYES.

To the Editor.—Sir: I forward the following statement for insertion in your valuable periodical.

About three weeks since, Mrs. Moore, residing in Church-path, Land-port, Portsea, the mother of five or six children, brought her infant, then about six weeks old, to me, to know my opinion respecting it, when I was surprised to discover that the child had no eyes. The eyelids were closed, and sunken deeply in the orbits, forming externally a considerable concavity. On raising the lid which concealed the left orbit, there was seen a quantity of apparently condensed cellular tissue, and no vestige of an eye. The ciliary margins of the right side were fixed pretty firmly in apposition, which appeared to have been recently effected by the adhesive inflammation, and the same process had seemingly commenced on the opposite side. The little sufferer was much emaciated, and suffering severely from an obstinate enteritic affection, which I anticipate will eventually release it from the miseries which life would entail on it.

This morning I had a conversation with a medical gentleman of this town, who informed me that the same appearances (with the exception of the adhesion mentioned) existed at the time of birth. I am, Sir, your obedient servant,

JAS. GEO. DAVEY, M.R.C.S.L.

3, Mile-end-terrace, New-town,
Portsea; March 23, 1836.

CALOMEL IN SCALDED GLOTTIS.

To the Editor.—Sir: I have read the excellent and practical lecture, by Dr. Wallace, in a late Number of THE LANCET, wherein he speaks of the good effects of calomel in controlling the effects of scalded glottis in infants. I do not take up my pen to dispute the priority of administering this medicine in such cases, but I leave the chaplet where it is, if Dr. Wallace gave calomel in scalded glottis previous to the spring of 1822. I was then living with Mr. Elliot of Kingsbridge, Devon, at the time when a person of the name of Willing requested that I would immediately visit her son, who had drunk boiling water from the spout of a tea-kettle. I did not know for a moment what could be adopted to mitigate the sufferings of this poor child, until, recollecting the recoveries I had witnessed by the administration of calomel in croup, I was prompted to try it on this occasion, when, as soon as the mouth became affected, I had the gratification of seeing my little patient begin to recover, and in two or three days it was at its usual gambols. I am, Sir, yours obediently,

JOACHIM GILBERT.

Beaminster, Dorset, March 26, 1836.

SEIZURE OF A FRENCH QUACK MEDICINE.

THE *Journal de Chemie Medicale*, for August last, contains the following report respecting some quack-medicine powders which were seized upon the premises of a vendor (a female) in the town of Metz, in France:—

The powders were accompanied by a pamphlet, entitled "A Treatise upon the Efficacy of the Powders of the Chevalier Godernaux, for purifying the Blood." The

intention of this pamphlet was to set forth the properties of these powders, which, it is asserted, will cure every description of disease. The value of this pamphlet may be estimated by the following passage, which is given *verbatim*:—This remedy acts as an emetic when the disease is seated in the stomach, and is a purgative to those whose intestines are affected with humours." The chemical analysis of these powders by M. Cheuvrenesse, professor of chemistry at Metz, was followed by the subjoined statement from that *savant*:—

"These powders were found to be possessed of considerable tenuity, and had a beautiful white colour. They were folded in glazed paper, and formed into packages. Each package contained six powders. One of the powders, on being weighed, balanced thirteen grains. When one of them was placed upon the tongue, it gave a metallic taste. Different portions of the powders were placed upon porcelain capsules, and treated with reagents. With the alcoholic solution of potassa, the powder became black. The same appearance was also produced by hydro-sulphuric acid. The powder is insoluble in water, and likewise in alcohol. When thrown upon ignited charcoal it was volatilized, and gave out a white vapour, which had no smell. This vapour, as well as the powder itself, when received upon a plate of gold, gave that metal a white colour, and was unctuous to the touch. All these experiments appeared to show that the protochloride of mercury enters into the composition of these powders. When a certain portion of one powder was submitted to sublimation, protochloride of quicksilver was obtained. Finally, the researches which were made upon them showed—1st. That they were, generally speaking, uniform in character, and that, besides the protochloride, they contained a very small quantity of oxide of mercury, and also a small proportion of that semi-metal in a pure state. In addition to the above, they contained a notable portion of an oxide of antimony. 2ndly. That they caused accidents (*des accidens*). Amongst others, a woman at Metz, affected with an intermittent fever, was placed in a dangerous state by their use, upon which Dr. Fresto was called to attend her, when the powders being examined, and M. Marchand, the mayor, being informed of the dangerous effects caused by them in the city of Metz, ordered a seizure to be made of all the powders which could be found, in different houses, in that city."

By the adoption of this summary and salutary measure, the trade in quack medicines would soon stop in any country in which pill or powder poisons were recommended to the people as "medicines which would cure all diseases."

EMPLOYMENT OF NOSTRUMS AND SELF-TREATMENT.

To the Editor of THE LANCET.

SIR: Your able and very eloquent leading article, in last Saturday's LANCET, on the subject of nostrums and self-cure, induces me to send you the following observations on the same subject for insertion in your highly-valuable work.

Since the year 1796, the press has groaned under publications by authors on self-cure. In contemplating their professed wishes to serve mankind, and their expressions of disinterestedness and benevolence, we almost overlook the extravagance of their propositions; but, as credulity in promises of this nature invariably misleads the judgment, it is necessary to canvass them fairly, and state our objections with temper and moderation; for although no one is compelled to adopt an erroneous system, yet every man who knows it to be such, and that it is, consequently, injurious to society, should labour to refute its evil tendency.

It is impossible to understand any science, without investigating its first principles. Without this, chance, instead of choice, must direct our operations; for, he who does not know *which* is best, can have no choice. The faculty, as a body, from their learning, their professional skill, and their humanity, justly stand in the first rank of useful men. Authors on self-cure flatter the vanity of the public in the teeth of their own conviction, and give the lie to a truth which has been confirmed by the experience of ages,—namely, that the period assigned to human existence is *too short* for the attainment of a complete knowledge of medicine; so abstruse, so various, so difficult, and so complicated, are the studies leading to such general knowledge. And yet these authors profess to make physicians with as much ease as the king makes knights!

In syphilitic complaints, it is by time chiefly that the disorder becomes inveterate; hence the indispensable obligation on patients to make an early disclosure of their situation. False shame exposes human life to as much danger as false courage; therefore, whatever shame may attach to the contracting of this disease, there ought to be none in getting rid of it.

Ignorant nostrum-mongers, and quackers, of themselves cut out more work for the regular physician than all the indiscriminate intercourse of the sexes.

The following case, which fell under my own observation, presents a striking instance of the folly of men attempting to cure, or, rather, to *quack* themselves. To prevent others from being wrecked on the

same rock of presumption, I regard its publication as a sacred duty:—

A young tradesman, residing in Bishopsgate-street, contracted the venereal disease, and was infected with a chancre on the glans penis, and one on the prepuce. For the cure of these, he took for a considerable time a "never-failing" nostrum, but without any beneficial effect. He then purchased a popular work on the complaint, by which patients could "easily cure themselves in secret;" but the advice of the author availed him not, although the reader was supplied with a complete list of the various medicines which are of known efficacy in the cure of this complaint. This young man followed the author's directions to persist in a mercurial course until his mouth became sore, and to apply mercury externally besides. Yet the disease appeared to augment in virulence. He therefore increased his dose, and more frequently repeated the external mercurial application. But here mercury was of all medicines the most pernicious, for the constitution had a strong inflammatory tendency, and the use of mercury only served to increase that inflammation which it was of the first importance to allay. Through this neglect the prepuce and glans swelled so enormously, that he was obliged to keep his bed. Here, for the want of proper medical attendance and judicious applications, a gangrene ensued, and he remained in that shocking state (mortification having spread nearly over the whole of the testicles) for four days, without a moment's intermission from the most excruciating pain. At this lamentable crisis I was called in,—to witness, as it were, the sad end of this victim to self-quackery. He was so much reduced by the effects of mercury and the disease, that there did not remain the slightest prospect of his recovery; however, after removing the sloughed parts, and ordering the necessary fomentations and poultices, I prescribed for him opium and bark, with a free use of port-wine. On my next visit he was languishing and low, but the opium had procured him some alleviation of pain. The medicines and nourishing diet were useless, for the patient expired on the next day. The livid appearance of the skin, which is a characteristic of incipient mortification, he had considered to be a proof of the great virulence of the venereal poison, and therefore increased the dose. The painful story carries with it its own moral.

Secrecy, in the treatment of this disease, being desirable, from various combining circumstances, a capital bait is thus afforded to youthful credulity, by the flattering promise that patients can *cure* themselves in *secret*. I tell such patients that they can also *kill* themselves in secret.—I am, Sir, your obedient servant, MEDICUS.

March 22, 1836.

LECTURERS WORKING TO BE EXAMINERS

To the Editor.—Sir: I have read the last week's remarks in the "Medical Gazette," and cannot but smile at its arguments respecting the appointment of examiners for medical degrees. Vain are its wishes to get lecturers, and lecturers only, appointed examiners in the new University. The appointments would be merely a means on the part of hospital physicians and surgeons to get pupils. "Enter," they would say, as they now say, or intimate, "to *my* lectures, and to *my* practice, and there will be little doubt of your getting through your examination." The proceeding is already quite *notorious* in a northern capital; students have attended the best lectures by the best lecturers in Europe, have made themselves, so far as students can make themselves, masters of their profession, both in theory and practice, and have then appeared before the examiners to take their degrees, and (not having entered to the lectures of those examiners) *have been rejected*. The same students have afterwards paid the examining lecturers' fees, and *within a month from that time* (*without having attended one of their lectures*) they have been again examined, and *have passed their examination!* The fees,—the fees only, to the examining lecturers, did the business. I know more than one instance of this sort. I am Sir, your obedient servant G.

25th March, 1836.

THE CERTIFICATE TRADE.

To the Editor of THE LANCET.

SIR: If honour and good faith in medical education (or as you have so well termed it, the "ticket system") were more strictly observed by the parties for whose express interest it was designed, namely, *the teachers*, even the pupils would be bettered by it. I have to express serious dissatisfaction against the proprietors of an establishment in which, unfortunately for the pupils, quiet and good order, so essential to successful study, have been replaced by schism and debate, the pupils at the same time suffering much injurious misrepresentation from hands which should rather have been raised in their defence. For, Sir, without assenting to all your eulogies on the merits of the pupils, who with so much apparent generosity expressed their sympathy with a fellow-student, *supposed* to be oppressed, yet I am sure that those pupils would not deserve the anonymous malignity with which they were assailed by the *Medical Gazette*. Moreover, they should have been spared this, by Dr. Cummin's recollection that by

those very slandered pupils he gets his daily bread, and that the pupils bestowing on him that bread, have more than once raised their hands in generous acclamation of his discharge of his duty, when they thought he stood in need of encouragement. This gentleman's retirement from his class could not be beneficial to the members of it, and I am glad the intention has been abandoned, as it must have greatly impaired the value of the past season, by interrupting the arrangement, and the mode of teaching adopted in his lectures. If the mischief arising from Dr. Cummin's indiscretion ended here, I might be but little disposed to blame him more severely, thinking that your merciless castigation of the flippant and affected malignity of the bread-pill journal, has been almost disproportioned to the obscurity of the offenders, although certainly not exceeding the bad deserts of the *motives* of a publication, the fabricators of which clearly want only courage to be assassins.

The rumour in connection with the libels on the pupils of Aldersgate-street School, is, that the dissent of its most important teacher, Dr. Marshall Hall, from the medical Toryism of his colleagues, will lead to his retirement from the office,—a proceeding which, like that of Dr. Cummin, must lead to similar injury and inconvenience, and to the degrading transfer of two scores of pupils (like sheep or calves in the neighbouring market) from preceptors self chosen, to new adventurers in the *speculation*. Persistance in and practice of such a system of medical education, are certainly not very flattering to students who would hold their heads high as men of science and as gentlemen. It certainly cannot be useful to youth to be tossed like shuttlecocks to and from every speculator in the ticket system in town. It is very likely that the pupil's money will be offered to be returned; but I contend that they are entitled to a more ample reparation, - to no less than the continued instruction by Drs. Hall and Cummin, in a vicinity *very convenient* to the place from which they may depart, until *all* the pupils who entered at the school on the assurance and expectation of its permanency, may be in possession both of the quantity of instruction and the certificates for which they were induced to pay beforehand. Justice, better taste, and gratitude, would lead teachers to volunteer this, instead of having it extorted from them. The pupils are not ciphers in these arrangements, and they ought not to be treated as such. The teachers of a school are not precisely like waiters at a tavern, who may be changed without consulting the guests,—unless, in fact, the only things dealt in are the certificates, but even then the pupils should have paid to them *courtesy* and *respect*, as well as certificates. In that respect, guests at a tavern do have that advantage. Why, Sir, if the present system continue much longer, we shall have wandering medical "stars" among the teachers, and the 1st of October will be ushered in with such announcements as the following at the schools,

"WONDERFUL NOVELTY! REMARKABLE COMBINATION OF TALENT!

AT IMMENSE EXPENSE AND TROUBLE,

The Manager of the above

MEDICAL THEATRE

Has engaged the services of DOCTOR ASPHYXIA JURISPRUDENCE, from Ireland, and PROFESSOR MICAPANIS from Pimlico, who are pledged to perform twelve nights during the season. As the engagements of the above Gentlemen are limited, and the applications are very numerous, the pupils and the public are invited to an early application for *tickets* and places."

This supposition is one neither of fancy nor exaggeration, as, *without* the candid and attractive announcement, the farce is *actually being played*.

One of the manifold advantages that must result from the establishment of the metropolitan University, will be the extinction of small, irresponsible, and *private* schools, in which TEACHING is a trade, and *ticket certificates* are the actual article of traffic; just, as in the streets we have "GROCERY" over the door, and *sugar* and *plums* are the things sold within. The private teachers will, however, be then ready to compete for places of honour and real usefulness in the university. A great vice of the certificate marts is, the want of *permanence*, which must end, as it ought, in *want of confidence*. The pupils of Aldersgate-street are also unfortunate in another particular. The eminent services of Dr. Birkbeck were announced in the October "Bill," though Dr. B. has never made his appearance in the school. I should be glad to know the reason of the absence of this eminent performer, especially as the "season" is fast drawing to a close, and the "benefits" are near. I feel a considerable interest in all these circumstances, for I regret to add, that I have a near relation, one of the pupils, and I have, by recommending, become, as it were, responsible to several others.

In case the rumours are verified, I should like to know to what medical drovers the flocks of Drs. Cumming and Hall are to be disposed of, and whether they will be sold like lambs, by the "score," or, like oxen and slaves, "per capita." I am, Sir, your obedient servant,

W. B.

March 20, 1836.

THE LANCET.

London, Saturday, April 2, 1836.

THE Quacks, *regular* and *irregular*, are well-nigh frightened out of their intriguing senses, at the prospect of seeing instituted an ANTI MEDICAL-QUACKERY SOCIETY. Amongst others, the unfortunate RODERICK MACLEOD* has taken the alarm, for he begins to suspect that HIS "College of Health," like MORISON'S, both being located in the same road, or street, is about to fall into ruins. "MORISON'S VEGETABLE PILLS;" "MACLEOD'S BREAD PILLS;" both have had their day. The *first* have killed; the *others* have let die. The *first* have been proved an *active* poison; the *second*, a *passive* source of destruction; though it cannot be the fact that *both* have been employed as instruments of fraud and extortion. Aye?

Somebody has just stated in print, that before we can work with sufficient effect in rooting out quackery from amongst the *undiplomatised*—amongst the *unlicensed* humbugs, a vigorous attack must be made at the commencement, in the ranks of the "regulars" belonging to our Colleges and Companies. The suggestion—if it be considered a *new* one,—we may state *en passant*, is by no means applicable to the Editor of this Journal, who has been engaged almost constantly dur...g the last thirty years in exposing the frightful system of quackery which has been invented and sanctioned by our medical colleges. Had a rational and an honest mode of government found its way into those institutions twenty years since, quackery in medicine would, by this time, *have been as little known and practised as witchcraft*. Why is the belief in the curse of the weird sisters almost annihilated? Simply because the knowledge which the people have acquired within the last fifty years, has instructed them, first, to view with doubt, and, secondly, to examine into, the possibility of the existence of events which have been alleged to spring from mysterious or supernatural causes. The clown, in his dark-minded superstition and ignorance, seeks to obtain relief from his own bodily sufferings,—for the calamities of his relatives,—to check the murrain among his cattle,—by plunging a pin or a needle into the skin of a defenceless old woman. His effort may be the subject of derision with hundreds of observers. The finger of scorn may be pointed towards him at the corner of every street. But it is not laughter, or scorn, or contempt, or even whipping, that can shame him out of his belief in the power of the "curative" effort which his ignorance has led him to make. Imprison him for the assault, and he regards the administration of the law as persecution, believes that he is a martyr, and denounces with bitter curses the supposed powers of the feeble and innocent being whom his untutored mind has transformed into a merciless hag. Take this clown and give him the advantages of a sound education. Give him even only an *elementary* knowledge of the causes and effects of the unvarying, the undeviating laws of nature. Does witchcraft present any terrors to his *new* understanding? None. He laughs at even the supposition of its existence. The mystery is dispelled. He is enabled by his new position to take a nearer and more correct view of whatever objects are placed before him, and he is taught to ratiocinate, and form just conclusions. In fact *a mind* is created out of the operation of his senses, and it is to that mind that an appeal is made in all matters which concern the human intellect.

Now, what happens in the odious, the infernal system of medical quackery? *Here* a belief in a new kind of *witchcraft* is called into existence, and the impostors

* One of the physicians of *St. George's Hospital.*

who profit by the knavish inventions, direct all their appeals to the superstitious faith of their victims. Are we not, therefore, instructed by the frightful examples which we every where see before us, that every veil and cloud of mystery by which the beautics of the ennobling, the health-securing, mind-creating science of medicine, should be at once and for ever annihilated; and often as we have called for the means of giving the people demonstrative information into the wondrously-constructed intricacies of the organized fabric of the human body,—often as we have called for the extinction of the mysterious signs and symbols which are employed in medical prescriptions, and for the discontinuance of the mystery which is created by labelling drugs in a dead language, never did we urge those demands with more sincerity, than in repeating them on this occasion. What is the charge against the quacks? Why that they employ SECRET medicines. What is *our* charge? Why, an accusation of the system that is sanctioned by our colleges. Why, that the terms which are in ordinary use in all medical shops, and in prescriptions, operate in some cases so as to exclude the public entirely from being made acqnainted with the medicines which are administered to them; and in *all* cases the system *tends* to produce the like results. In the system which is sanctioned in the colleges and the profession, no secret terms or medicines are sanctioned, so far as *the practitioners themselves* are concerned. Whatever is known to one is freely communicated to all, for the advantage of science, and the benefit of the community. In the case of the quacks, on the contrary, some mercenary intriguing fellow pretends that he has some *wonderful* medicine which is "a cure for all diseases," and the entire success of his contrivance depends on the quantum of belief which is capable of being established relative to the potency of his *secret* agent. Without the *secrecy* he could accomplish nothing, because an exposition of the materials of which the medicine must be composed, would prove that they could not be applicable to all diseases,—that common sense would instantly spurn the idea that a few grains of aloes, gamboge, cream of tartar, and asafœtida, could be applicable to a scientific and safe mode of treating the diversified diseases which afflict the human body. The public, however, on being pestered with *two* systems of secrecy, have not sufficient discrimination to ascertain which of them presents the least danger; and, moreover, on finding that THE COLLEGES *exclude the general practitioners in medicine from holding seats amongst them at the Council tables of those institutions*, the public are naturally led to consider them as an *inferior class*, or, what Mr. BRODIE denominated, "A SUBORDINATE CLASS," who, therefore, are not entitled to the general confidence in the treatment of sick persons. Is not such a state of things enough to astonish, to confuse, and to mislead? Again, then, do we protest against the mode of governing our colleges,—against the interdictions to which the respectable body of the profession is exposed,—against the system of secrecy which is practised and sanctioned by writing prescriptions in Latin, and by labelling our drugs in that language?

The unfortunate RODERICK MACLEOD, a Licentiate of the London College of Physicians, and a physician of *St. George's Hospital*, is himself *an authority* on the subject of quackery, as it is practised under the garb of *secrecy*. Aye; *practised by himself*. What a pair! MORISON, of the *College of Health*, New Road. MACLEOD, of the *Asylum of Health*, New Road,—this latter person being, as we have already remarked, a Licentiate of the boasted *Royal College of Physicians in London*, and physician of *St. George's Hospital*. No wonder that RODERICK writhes under the prospect of establishing an ANTI MEDICAL-QUACKERY Society. No wonder that these two brother doctors of colleges in the New Road, make

common cause in denouncing such a scheme. But while MORISON, his pills, and their effects, are notorious, MACLEOD, *his* pills, and *their* effects are not quite so well known. Let us, therefore, copy a prescription and a paragraph which are contained in a little book that is now lying upon our table, entitled—

"FORMULÆ
USED IN HIS
MEDICAL PRACTICE,
BY
R. MACLEOD, M.D."*

We give the extracts *verbatim et literatim*. Not a word, not a syllable, not a letter, not a stop, have we altered. They are to be found at page 23 (formula 40) exactly as follows:—

"PILULÆ EX MICA PANIS.

"℞. *Micæ panis* ʒi.
"*Divide in pilulas* xii, *quarum una sumatur ter quotidie.*
"These pills are extremely useful in convalescence from almost all diseases, and with due attention to diet and regimen will frequently remove many obstinate complaints, such as hypochondriasis, hysteria, dyspepsia, and amenorrhœa. Some care, however, is required in their exhibition, as a considerable number of instances have occurred at the Westminster Dispensary, in which patients have complained much of the severity of their effects."

Such is the prescription, and such are the comments upon the administration of a drachm of crumb of bread, made into twelve pills, which have been written by a person who now holds the office of physician in *St. George's Hospital*,† and is a Licentiate of the *Royal College of Physicians in London*. If MORISON be a quack and an impostor, what is RODERICK MACLEOD? The public shall answer, now that they have read the remarks upon his own bread-pills, and when they have seen the Latin prescription for those pills placed in juxta-position with the translation of the prescription, which we here subjoin:—

"℞ *Micæ panis* ʒi.
Divide in pilulas xii, quarum una sumatur ter quotidie."

RECIPE.—*Pills from crumb of bread, one drachm. Divide into twelve pills, of which take one three times daiiy.*

Having, for the benefit of the non-medical reader, thus placed the prescription before the public, we entreat him to peruse once more the comments which were offered on it by the author, who is physician, as we have said, to *St. George's Hospital*, intimate friend of the president of the College of Physicians, and hired scribbler for the corruptionists of the two medical colleges and the pure surgeons of the metropolitan hospitals. Had we not given this notice of MACLEOD, MORISON might have most justly charged us with an unfair execution of our duty as public journalists, an accusation which it is our earnest desire on all occasions to avoid, by dealing out the same measure of justice to quacks and impostors of every grade. Is MORISON guilty of fraud when he charges a shilling for some drachms of secret medicine? If there be guiltiness in his conduct, it is in maintaining *secrecy* in the system which upholds a continuance of the fraud. Assuredly, however, RODERICK cannot be a less guilty man when he makes use of Latin terms in writing these prescriptions, and receiving guinea fees for directing his unsuspecting patients to take five grains of bread crumb three times a day. Alas for the profession, unless the practices of the MORISONS and the MACLEODS, their *Colleges* and *Asylums of Health*, if they be not subjected to general reprobation and eternal discontinuance! Whatever therefore may be stated by these parties against the institution of an ANTI-MEDICAL-QUACKERY society, we can allege with confidence, that if the government of the regular medical practitioners by the colleges, be not wholly altered, and if the use of mysterious signs be not abolished in our profession, through the intervention of a well-organized society, or some other equally powerful machinery, the degradation

* London: Printed by J. M'Gowan, Great Windmill-street."
† Situated at Hyde-Park-Corner.

of the profession will persist, and human lives will continue to be sacrificed.

The conduct of some of the Governors of Christ's Hospital, in the case of Mr. Tarbutt, must prove most injurious to that institution. As the affair, however, is *sub judice*, we refrain from saying more on the subject at present.

GERMAN JOURNALS.

Perforation of the Ileum by a Lumbricus Ascarides.—The *Gazette Medicale* for 1833, No. 62, contains an observation of a case where a quantity of worms were discharged through different parts of the body. In the No. for April, 1834, of *Hufeland and Ossan's Journal*, we find a case of perforation of the intestines by ascarides. We also find a similar one in the June No. of 1835, p. 8.

Case.—A child, four years old, who had all the symptoms of a worm affection, was treated, during a period of fourteen days, with all the usual anthelmintic remedies, but without any effect; in a few days the mother of the child informed the author that she constantly complained of a short intermitting pain below the umbilicus, with a sensation of something biting or pricking her there. The child was free from all fever, but the abdomen continued developed and full; the above-mentioned sensation in the abdomen also continued, and at length a tumour, about the size of the point of the thumb, became evident in this part; the tumour grew gradually softer, gave way, and discharged a yellowish pus. The opening of the abscess was not larger than half a pea in diameter; it gave issue to a large ascarides, but did not subsequently heal up; a fluid of a thick, yellow colour continued to be discharged from the orifice, and the little patient died in a state of great emaciation on the third week.

Autopsy.—On examining the body after death, a small portion of the ileum, near its origin, was found adherent to the anterior wall of the abdomen; at the points of union the peritoneal tunic of the intestine and its external coat appear to be rough, softened, and covered with coagulable lymph; in the middle of this adhesion the gut was penetrated by a circular hole as large as a good-sized pea, while a similar opening communicated between the intestine and the external surface, through the abdominal parietes. There was no trace of alteration or worms in any other part of the intestinal canal; the pus had made its way extensively between the layers of abdominal muscles.

This case does not prove that the intestinal canal, and the muscles and integuments of the abdomen &c., were perforated by a worm; the communication was evidently the effect of chronic inflammation and abscess of the intestine and soft parts, proceeding from within outwards; the author of the case, however, seems to think differently, and cites in support of his opinion the absence of all inflammatory symptoms during life, and the peculiar circular shape of the opening through which the worm was discharged. However, he confesses it probable that destruction of the tendinous sheaths was rather produced by inflammation than by any action of the worm.

HEMORRHAGE DURING PARTURITION FROM VARICOSE TUMOURS.

The following cases of dangerous hemorrhage from the bursting of varicose tumours, show the possibility of the occurrence of an accident which we do not find mentioned, in the manner it deserves, in any of our classical writers upon midwifery. It is related by Dr. Elsasser:—

Case 1.—A strong woman, 41 years of age, became pregnant of her fifth child. The pains commenced at eight o'clock in the evening: the waters came away at midnight, and the pains returned with increased force. The patient now complained of general uneasiness, and on examination a deep-blue-coloured tumour, as large as a child's head, was found occupying the right labium. This tumour suddenly burst, discharged a quantity of thick dark blood, and in a quarter of an hour the woman died in violent convulsions.

The child's head was found in the middle of the superior straight, and in the first position. The child itself dead and bloodless. In the centre of the labium was contained a cavity filled with half-coagulated blood, evidently furnished by the bursting of a varicose vein. The vessels of this part and of the right lower extremity were very much enlarged and varicose. The outlet of the pelvis was considerably contracted by projection inwards of the os coccygis, which was immoveable upon the sacrum.

Case 2. A woman died in consequence of an hemorrhage occurring during a labour, which continued for twenty hours. The physician, who was not called upon until after her death, discovered that a tumour on

the right labium had burst into the cavity of the vagina. The fissure conducted to a cavity of about four inches in diameter, which ascended upwards under the pubis, and into which a varicose vein opened by a communication half an inch long. The former labours of this female were all rendered difficult by the narrowness of her pelvis.

Case 3.—A strong woman, 34 years of age, was pregnant for the eighth time. The labour proceeded regularly for some time, when she was suddenly seized with a copious flooding of dark coagulated blood, which carried her off in half an hour. The accoucheur, called on too late to render any assistance, found a purple-coloured tumour in the right labium; it had opened in three places, and the orifices communicated with a cavity containing a quantity of grumous blood. — *Kleinert's Repertorium*, November 1835.

The cases which we have just noticed, prove distinctly that flooding, terminating fatally in a very short time, may be produced during labour by the bursting of varicose tumours into the internal labia; and this accident is particularly liable to happen when the child is fully formed and the pelvis small. The manner in which the rupture of the vein takes place, is easily explained by the reflux of blood, whose passage through the vessels is totally impeded by the pressure of the child's head; and the fatal termination of the three cases shows that a long-continued loss of blood, though in moderate quantity, is not without danger during labour. Besides, the varicose state of the veins often depends upon a similar peculiarity in those of the uterus, which are naturally much larger than the arteries, towards the end of pregnancy.

Hemorrhage arising from the bursting of large varicose tumours in the vagina are very dangerous, especially when they burst inwardly. (See *Osiander Anzeig, Zur Hulfe*, &c., page 86.) Rupture of these tumours has sometimes been observed during pregnancy, and (l. c. p. 89) we find a fatal case from rupture of the right internal iliac vein mentioned in *Hufeland and Ossan's Journal*, July 1817, page 100. On the other hand, the female's life is seldom endangered by the bursting of these same tumours, when the blood is effused into the cellular tissue, and there forms a blue-red tumour that does not give way during delivery. The author has observed one case of this latter kind, where the tumour was as large as a child's head, but did not give way until the fourth day after delivery, when a quantity of grumous blood was discharged without any injury to the patient's health. The danger of this accident however may be much diminished by timely assistance. The patient should be immediately placed in the horizontal position, and air freely admitted. In some cases bleeding from the foot is necessary. A sponge dipped in brandy, or some other styptic fluid, should be placed over the orifice of the cavity, and compression exercised until the child's head descends far enough to compress itself the bleeding veins. After delivery the vagina must be plugged. The author does not approve, as it would appear, of opening the tumour with the bistoury.

TRANSFUSION OF BLOOD.

The following cases in which this treatment was pursued by Dr. Klett of Heilbron, were attended with the happiest results:—

Case 1.—A woman, 41 years of age, of nervous temperament, after having passed over two menstrual periods, was seized with hemorrhage from the uterus, which soon became very profuse. The author was called upon in eighteen hours after its commencement, and found the patient very much reduced and pale; the pulse barely perceptible. The abdomen was fomented with brandy, and the extremities washed with warm wine. The patient took, internally, *Extr. Ratanh.* in *Aqu. Cin.* c. *Tinct. Cinnam.* et *Naphth. Acet.* The breast and abdomen washed with naphtha; astringent injections thrown up; all these means were of no avail: the flooding continued, and symptoms of dissolution were imminent. In this dangerous state it was thought advisable to inject about two ounces of blood taken from the arm of her husband. The pulse immediately rose a little, and the skin became warmer. The remedies already administered were now repeated, and the flooding did not return. The cure was completed under the use of bark, iron, &c.

Case 2.—A woman, 30 years of age, had suffered during ten hours from severe flooding, when she sank into a state of complete collapse. The remedies commonly employed under such circumstances were administered in vain, and life seemed fast ebbing away, when two to three ounces of blood from the arm of her husband were injected. The symptoms of prostration were immediately relieved; the bleeding stopped gradually, and the female was restored to perfect health under a strengthening mode of treatment.

LIGATURE OF THE CAROTIDS IN INSANITY.

A PAPER *in Kleinert's Repert.* "On Ligature of the Carotids as a Means of Cure in Certain Forms of Mental Derangement," by Dr. F. BIRD, contains some interesting remarks. The author has collected together a certain number of cases of ligature of the carotid arteries, with the object of showing the influence which this operation exercises on the intellectual as well as bodily faculties.

The first case refers to a female 32 years of age, of weakly constitution. Dr. Bjerken tied the common carotid artery for a pulsating tumour below the right ear; the patient had suffered extremely from pain in the head, was quite deaf and at times stupid; the sleep was uneasy, the menstrual discharge diminished, appetite lost. Immediately after the operation the patient recovered her hearing, but was attacked by severe pain in the head, which required the use of leeches, cold, &c. For forty days the patient was unable to leave her bed without bringing on violent vertigo, but after that period she quickly recovered her health and intellectual powers. The second case is reported by Texor in *Chiron*, bd. 2, heft. 2. The third by Mr. Mayo, in the *London Medical and Physical Journal*, December 1829. The fourth case of ligature of the common carotid refers to an operation performed by Dr. Horner in Pennsylvania (see *Repertorium*, April, 7th year, p. 58). The fifth case may be found in Froriep's *Notizen*, vol. 36, Feb. 1833. A child four years and a half old, of scrofulous temperament, was operated upon by Professor Moller of Copenhagen, who, on the 13th September 1831, tied one common carotid artery, and on the 28th January, 1832, tied the other. The operation was successful.

From the above cases the author draws the following conclusions:—

1. One or even both carotid arteries, may be tied without necessarily endangering life.
2. The operation is not suited to old persons, in whom the venous system predominates, but to young and healthy persons whose arterial system is active.

OPERATION ON AN INFANT'S HAND.

To the Editor.—Sir: The following case is at your service for insertion. Your obedient servant, E. CRISP.

Walworth-road, Feb. 27, 1836.

Aug. 3rd, 1835, I delivered Mrs. Vane, High-street, Camberwell, of a fine healthy boy, but soon after birth discovered that the little, the ring, and the middle-fingers of both hands were united by a firm fleshy substance; the junction between their extremities was *cartilaginous*.

Aug. 17. I separated the little and ring-fingers of the right hand, as far as the metatarso-phalangeal joints; a small artery was divided, but was easily secured; a thick piece of lint was placed between the fingers. The wound was dressed on the fourth day, and perfectly healed on the 25th of August. I operated in the same manner upon the remaining fingers, Aug. 29th, Sept. 29th, and Nov. 24th. The child had very little constitutional disturbance; the fingers at their bases are now united by a thin membranous webb, but the child has the perfect use of them.

Had the operation not been performed at this early period, I believe that bony union would have taken place at the extremities of the fingers. Indeed, in operating on the left hand, I had some difficulty in cutting through the cartilage. Mr. Wardrop (LANCET, 1833) says, "I generally prefer operating on infants a few days old, to waiting until they have reached a more advanced period." So far as one case can have any weight, the above instance proves the judiciousness of this opinion.

GUY'S HOSPITAL.

To the Editor.—Sir: Amid the clamour for *equal rights*, I beg to draw your attention to the following piece of one-sided justice.

A few days since one of the porters of *Guy's Hospital* was dismissed for purloining a few coals, not for sale, but simply for his own use, and for this offence he has been dismissed; while another porter, a colleague of his, of the name of Mountain, is, and has been for some time, allowed to physic half the dissolute frequenters of the Borough-market, with copaiba mixture, blue pill, compound decoction of sarsaparilla, senna and salts, roses and salts, &c., &c.,—and all under the very noses of the proper authorities of the hospital, and this porter is permitted to carry on the game with impunity,—having the porter's lodge frequently beset with people, for "*his opinion*," though when the case gets "beyond his skill," he kindly transfers them either to the assistant medical officer or the proper medical officer for the week.

Ought these things to be permitted to

exist, and in a place too where, above all others, the "officers," from Benjamin Harrison downwards, profess to be immaculate? I pledge myself for the statement I have made, having many times been an eye witness of the fact. I am, Sir, yours, &c.,

A PUPIL.

*** This is a "*Free Hospital* case" for the interference of Mr. Bransby Cooper, if an official inquiry be instituted by the governors. With regard to the motto of "equal rights," we may observe that our correspondent would have prefaced his statement more appropriately, by adopting the rallying point of "equal wrongs,"—a "clamour" which has hitherto been the loudest at *Guy's*. The Borough-market doctor may now join in the cry with some title to speak up for "vested interests" and "prescription rights."

INVENTION OF THE LITHOTRITE.

To the Editor.—Sir: It is with extreme reluctance that I again obtrude myself on the notice of the profession, to substantiate my claim to the invention of the lithotrite. I hoped, from all that had been written on the subject, that my right to it was fully admitted, and it was with surprise that I saw in the last number of the Medical Gazette, a letter from Sir B. Brodie to Sir Charles Bell, in which the priority of invention of the curved instrument is given to Baron Heurteloup.

The invention, whatever may be its merits, is mine, and for the truth of this assertion I appeal to the Baron himself, to whom, in the presence of Dr. Boyton, I showed an instrument of the same construction as that now used by him, namely, a curved instrument with an inner sliding blade. At that time he was using the straight drill of Civiale, but he immediately laid it aside, and adopted the curved instrument. True he was the first who applied it, but that does not invalidate my claim to the invention, nor is it affected by shortening the curve of the instrument. The substitution of the hammer for the screw he is entitled to, but it is well known that the screw has superseded the hammer in almost every instance, and has been used with complete success by the following gentlemen: Sir Benjamin Brodie, Sir Charles Bell, Mr. Guthrie, Mr. Stanley, Mr. Tyrrel, and others; I therefore must contend that not only the priority of invention, but even the principle and the perfection of the instrument at present in use, belong to me. This may appear, to those who have not examined the different instruments, a very bold assertion, but in further corroboration I beg leave to refer to Mr. Aston Key, Senior Surgeon of *Guy's Hospital*, for whom I have constructed an instrument which bids fair to effect more in lithotrity than has hitherto been done.

Had the Baron given me the credit for that share in the invention which is justly due to me, I should have no complaint to make; but he has thought fit, not only to hold himself out as the inventor, and withhold any little merit that belongs to me, but to decry the utility of my instruments, and depreciate them in public estimation. I beg, moreover to say that I did not make the instrument which bent in the bladder of the unfortunate patient alluded to by Sir Charles Bell.—I beg to remain, Sir, your obedient servant,

JOHN WEISS.

62, Strand, March 27, 1836.

NORTH-LONDON HOSPITAL.

CHRONIC GANGRENE OF THE NOSE, FEET, ET CETERA.

C. S., aged 24, was admitted, Nov. 20th, under the care of Mr. LISTON. She is a prostitute of very intemperate habits, having been for some time in the habit of drinking large quantities of gin. She has also been much exposed to cold, and has frequently lain out for nights in the street. On Saturday night, the 16th, she received a blow or pinch on the nose, which gradually assumed a dark appearance. At present there is a gangrenous surface near the apex of the nose, surrounded by a livid margin; the part is moist, and has a few vesicles upon it. She complains of a dull aching pain in the part; pulse 88, feeble; tongue clean, but tremulous; thirst and languor; bowels open. She was immediately placed on full diet, and a quarter of a grain of the muriate of morphia given her every three hours. No application to the affected part.

22. The gangrene has not extended, and she says she is better and stronger.

25. The slough has separated, but the surface beneath appears unhealthy; complains of thirst; tongue moist, but rather loaded; pulse 70, feeble. A pint of porter daily.

30. Gradually improving; the ulcer healing.

Dec. 3. Discharged well.

March 8. She returned to the hospital to-day, having been in St. Pancras workhouse during the last month of her absence. For two months she continued her irregular course of life, drinking as largely as her means allowed her, and passing the night in the open air. The dark colour of the nose soon returned after such exposure, but it was not attended with much pain. About a week before her entrance into the work-

house she began to experience a stinging, pricking, tingling pain in the feet; they were occasionally numbed, and she felt it impossible to keep them warm. There was no pain in walking, but "she could hardly tell whether she had any feet at all." She perceived the toes becoming black, and this blackness rapidly extended over the feet. Poultices, generous diet, and anodynes, were applied and exhibited in the workhouse. Both feet are of a deep purple hue, the discoloration extending on the right one nearly as high as the ankle, on the left as far as the metatarsal bones. The toes are of a darker hue on the left foot, especially the large and small ones, and appear dead; the parts are quite cold, and were insensible on her first entrance, but having become warm, she now feels a tingling sensation in them; the nose is of the same purple colour, darker at the extremity; pulse 110, very feeble and irregular; tongue dry, but clean; thirst; pallid countenance. There is a large dark gangrenous surface over both nates, of the size of a saucer. She was ordered to have meat and beer daily. The parts were fomented, and she had a third of a grain of muriate of morphia three times a day.

March 10. There appears a more decided line of demarcation on both feet; the outer side of the right foot appears of a much darker hue than the other parts. A slight blush of red extends beyond the line of separation. She has occasional acutely shooting pains in the feet, more severe than before. Pulse 94, but less feeble; lips pale, hand tremulous; tongue slightly so, and pale and moist; bowels regular; enjoys her porter; vesicle on the dorsum of the right foot. There are unhealthy ulcers situated on the posterior part of each leg, a few inches above the os calcis; their surfaces are pale and irregular, and on the right has a dark slough rather larger than a shilling.

11th. More sensibility and some power of motion in the feet; phlyctenæ on the right foot; pulse 98, rather fuller; bowels confined; to have two spoonfuls of castor oil.

13. The castor oil was repeated to-day, as the bowels were not moved by the first dose, and it opened the bowels; ulceration commencing round the spots on the nates.

14. More tremor of the hands; complains of weakness and depression; pulse 112, and feeble; bowels thrice moved; tongue clean. The line of separation in the feet is straw-coloured, slightly raised, and vesicular. A mere touch on the surface is not perceived, but slight pressure is felt. The ulceration is extending round the nates. Mr. Liston considers the gangrene has extended a little on the right foot, and that the hue is in some parts darker. Water dresing to the line of separation on the nates. She was ordered small quantities of gin to-day in place of her porter.

Mr. Liston remarked that the treatment in a case of chronic gangrene arising from exposure to cold, in a constitution predisposed to the affection by bad living, and a long course of intemperance and irregularity, should consist in allaying the irritability of the system, and supporting the general strength; no benefit could accrue from any active local treatment; it was better to leave a good deal to nature, as incisions and stimulating and antiseptic applications were, in his opinion, calculated to do harm rather than good. The time might arrive when it would be necessary to assist in the detachment of the mortified parts, as it had been effected in several cases during the present session.

The pathologists and the historians had a field day at the College of Physicians on Monday last. The mysteries of the *coup-de-soleil* were unriddled in a paper which was read by Dr. Wilson for some aspirant to pathological fame in Pall-Mall-East. The new view of the matter is, we believe, that the sun's rays by striking upon the head, drive the blood towards the pulmonary apparatus, and produce apoplexy of the lungs. A second paper came from the pen of Dr. Rigby, who, smitten with the plaudits obtained by the President for his researches into the diseases of deceased noblemen and kings, took up the subject of royal and noble deaths by beheading, and proved that, after Lady Jane Grey was decapitated, somebody tickled her *sub axilla*, when the lips palpably laughed; and on somebody else giving her a tickle *sub rosa*, the cheeks as palpably blushed. Historical records inform us, that after Hampden had fallen by the axe he walked a furlong. On Dr. R. avouching his belief in the story, one Thomas A'Didymus laughed. "What! is the distance so very improbable?" demanded the Doctor. "Oh, not at all," said Thomas; "the only difficulty was the first yard."

Medical science gains fresh laurels every year at the Royal College of Physicians in London.

A Student at King's College overrates the importance, both of *King's College* and the *Charing-Cross Hospital*. The public have ceased to be anxious about the one, and have not yet begun to appreciate the merits of the other. He states "on the *authority* of one of the professors," that the union is to be effected by the 1st of October. The decision must have been very recent. We had heard, indeed, that Charing-cross had declined further negotiation, on the retirement of Mr. Green from King's, unless a large bonus was paid for the preponderance of gain to the College by the "union."